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ABSTRACT

This User's Guide discusses the content and character of the Flexible Learning System (FLS), a series of 15 "competency units" designed for inservice and preservice training in early childhood education. The FLS focuses on classroom process rather than prescribed curriculum, and reflects the values of open education. This publication is a guide to the FLS and the character of its use. The guide includes one-page descriptions of each of the competency units; a discussion of the FLS concept and its development and the characteristics of training implicit in the system; a report on the field testing carried out, and a description of FLS information dissemination and workshops. (MS)

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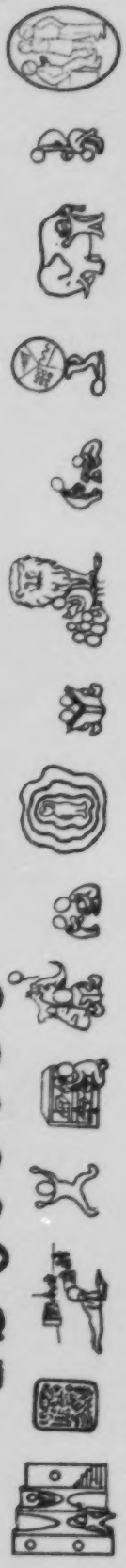

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the flexible learning system

# A Program for Early Childhood Staff Development

## Users' Guide

ED143413

# THE FLEXIBLE LEARNING SYSTEM:

## A PROGRAM FOR
## EARLY CHILDHOOD STAFF DEVELOPMENT

A USERS' GUIDE

by

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In Association With

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We want to take this opportunity to extend our thanks to the many people both within and outside the project staff who have played a critical role in the Flexible Learning System experience.

SPECIAL APPRECIATION IS EXTENDED TO:

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# OVERVIEW

Who is this publication for?

- People interested in using the Flexible Learning System (FLS) for staff development in early childhood education;
- People interested in the open-education movement and the development of teacher training material reflecting the values of open-education;
- People interested in one approach to Competency-Based Teacher Education (CBTE).

The Flexible Learning System (FLS) is a series of 15 "competency units" designed for inservice and preservice training in early childhood education. It owes its presence to two contemporary themes in educational innovation: a national concern with "compensatory education," expressed in Head Start and Follow Through programs, and the national emergence of Competency Based Teacher Education (CBTE). Over the last ten years, the Far West Laboratory for Education Research and Development has developed and implemented the Responsive Education model of Head Start, Follow Through, and parent education programs. The FLS is a translation of this experience into competency-based material for early childhood education.

This publication is a guide to the FLS content and the character of its use. It is not a step-by-step set of instructions. A "how-to-do-it" approach may well serve to guide the reader through FLS activities, but it would fail to reveal critical assumptions about learning and instruction. The purpose here is to present these assumptions by examining the development, content and use of FLS materials.

This publication is organized as a number of papers on various aspects of the FLS; some short and other quite lengthy. Each is preceded by a brief description of its content. Readers who are interested in the development and use of the FLS may want to read Part II. Entitled "From Practice to Product and Back," Part II explores how the FLS staff translated our experiences in implementing open-education into competency-based teacher training material, and how we have used the FLS within the spirit underlying its development.

Readers who are interested in using the FLS units may want to read Part I which includes descriptions of the FLS material, their interrelatedness, the intended audience, how FLS can be used, and the characteristics of training implicit in the system. The "Introduction" paper introduces three paradoxes that permeated much of our activity. This publication as a whole, addresses the character of their resolution.

The order of reading is left to the discretion of the reader. Likewise, we have bound the publication so that it can be added to as you compile additional relevant experiences. How well the FLS serves its prupose depends upon the insight and skill brought to its use. We have presented some of those insights. Your own experience will add immeasurably to its success.

## A BRIEF DESCRIPTION OF THE FLEXIBLE LEARNING SYSTEM

The Flexible Learning System (FLS) is a Far West Laboratory product for the practitioner. Developed with funds from the National Institute of Education and the Office of Child Development, the FLS provides print and audio-visual materials to help early childhood education personnel develop teaching skills in a variety of areas.

The FLS has its origins in Far West Laboratory's Early Childhood Responsive Education Program developed by Dr. Glen Nimnicht. Nine years of experience in developing and implementing Head Start, Follow-Through, and parent-education Responsive Education Programs provided a strong foundation for the development of FLS topics and training processes. During the past three years, the FLS staff under the direction of Dr. Masako Tanaka drew from these and other experiences and designed a set of activity-based materials for trainers interested in a process-oriented, personalized approach to both staff development and early childhood education.

An array of learning activities and media create a training process in which learners encounter ideas and skills through active exploration. The FLS materials have become more than merely books. Reading alone will not yield what is embedded in each of these units. Their full potential can be achieved only as a result of learner activity. The FLS units, properly used, can promote skills and insights richer than those conveyed by words alone.

The FLS is oriented towards practices that can create intellectually, socially, and personally optimum environments for learning. The focus is on classroom process rather than prescribed curriculum. Topics addressed include: self-concept, problem-solving, educational values and models, social interaction among and between children and adults, cultural pluralism, language integration, and concept development.

The FLS consists of an initiating set of 15 units that can be integrated into a variety of staff development programs. While each of the FLS modules is an integral whole covering 10-12 weeks of work and designed to convey specific knowledge, skilled trainers will find the FLS a rich resource for exploring a range of subjects much broader then the product list suggests. Activities from a number of modules can be re-combined to create new topics, or treated independently as specific elements of given topics. Positive results from continuous field-based evaluation suggests that this set of units can initiate and sustain the varied uses to which it is put by trainers and teachers.

The FLS units are currently being distributed by the Far West Laboratory (see Price List, page 24 ). They are also available through the ERIC Clearinghouse for Early Childhood Education, College of Education, University of Illinois, 805 West Pennsylvania Avenue, Urbana, Illinois, 61801.

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# INTRODUCTION

The Introduction sets the focus for the "Users' Guide" by posing three paradoxes: the translation of field-based training activity into written material; the relationship of individual competency units to the total Flexible Learning System; the relationship of parts of the individual units to the FLS as a whole. The clarification and resolution of these paradoxes is found in the educational theory and instructional design woven throughout the FLS. The purpose of this publication is to clarify these implicit themes.

The Users' Guide is designed as an attempt to share with potential users a description of what the Flexible Learning System (FLS) offers as a whole. On the surface this may seem like a straightforward task of describing what the FLS is, the uses to which it can be put, the audiences that can use it, the costs in time and resources that might be incurred, and the basic contents, as well as their organization. These practical issues deserve attention, and in the course of this guide they will be addressed. However, these surface issues do not reveal the more important and somewhat more elusive qualities of the FLS. What the FLS becomes in use, what it attempts to represent as an ideal form of education, is the deeper and more important concern of this guide.

The obligations which the guide must fulfill can be framed in terms of paradoxes. One of these is the fact that the FLS is written material. And yet, experience with the FLS as it is written and as it has been used, and the experiences that led to its formation, are very different from the kind of training that can be easily recreated through print. The helping of people to develop their skills in working with children, colleagues and adult students, has

depended upon a close way of working; a way that accommodates individual and unique experiences, needs and questions; a way that allows learners to provide their own focuses and learning activities; to find resources for solving problems generated for and by themselves; and to freely pursue problems and questions that arise in their pursuit of other answers. All this requires a very flexible and dynamic way of relating to people. It requires the sensitive handling of sometimes emotional conflicts between ideas and between people. There was a wide range of human experience entailed in developing the FLS. The richness of this experience and the responsibility to transform it into written material represented a conflict. This conflict presented the paradox of trying to maintain a simultaneous adherence to a philosophy of individualized, active and constructive learning and to the belief that this approach can be brought to bear on the lives of children through the production of printed teacher training materials. The resolution of this paradox can only be achieved by infusing into the FLS written materials the personal, interactive, and dynamic styles and the sensitivities of people trained to work with adults. These conditions which are necessary to realize the richer experiences the FLS has to offer will be more fully described in the section on "Elements of Training."

The FLS reflects the belief that knowledge is constructed by the learner, and that central to this process, is the provision of opportunities for the learner to control and manipulate the learning environment. Teachers subscribing to this view must learn to structure the learning environment such that it challenges the intellect, responds to and informs, provides feedback, and at all times is capable of manipulation by the learner.

The FLS has its roots in the Responsive Education Program experience. Originally developed by Dr. Glen Nimnicht, this is one of the national models

for early childhood education in Head Start and Follow Through programs. And yet, because it is restricted to a particular medium and to a particular set of circumstances, the FLS is its own manifestations, and, in many regards, is not synonymous with the Responsive Education Program, not only by virtue of what it is and how it shares, but, because it has a different function than the Responsive Education Program. The latter is concerned with the implementation of a particular educational model within a school, or a community of schools. Its thrust is program implementation and therefore, has particular ways of working and particular concerns that must be addressed.

The FLS, rather than a program, is a printed educational resource that addresses particular issues. It illustrates particular processes or ways of approaching adult and child learning and reflects the application of an implicit theory to the construction of an educational product. Users of the FLS should not only keep in mind the importance of the personal function of the trainer and the quality of the interactions with trainees, but also hold to the task of articulating in practice, the theoretical persuasion of the FLS. With these two things in mind it's possible to resolve the paradox of a print media designed to teach what is essentially learned in the course of working with people.

A second paradox can be understood by examining for a moment the history of this guide. Throughout the three year period during which the FLS was being developed, it had been assumed by most of the developers that something would have to be done in addition to writing the competency units that currently make up the system. Something, it was felt, had to be written to insure the intended use of the materials. This view, as well as some sense of the contents of such "trainers guides", was generated by the rich experiences developers brought to their respective efforts. These experiences were incurred in the course of training people and working with people, often in field

testing versions of the competency units themselves. There was a great deal of experience with how the units functioned, the reactions people had, the questions that emerged, the things that were unclear, the places where the instructions didn't work well, etc. All of this became important to the individual developers. Some of these insights could be incorporated in revisions and some could not. And this tended to reinforce the view that individual "trainer guides" would have to be developed for each unit to make this information accessible to future trainers.

During the past year, with the completion of the set of FLS units, we've had the opportunity to work with the system as a whole. In discussions with our National Advisory Panel, Dr. Millie Almy, Dr. David Elliot, Dr. Lilian Katz, Dr. Ken Howey and Ken Komoski, it became clear that it would not only be redundant to write "trainer guides" for each unit, but that there was an issue that needed to be spoken to, that is, the system as a whole. The final resolution was to produce a single guide to tell people what the FLS is and how it can be used.

Now the paradox referred to earlier is this: During the development of the FLS none of the individual developers had a sense of the system as a whole, at least not one that could be readily shared. It was hard to speak to what was common to all our efforts. Yet at the same time because of the common experiential background of the developers (i.e., the Responsive Education Program) there turned out to be implicitly a great deal of commonality between the various units. This second paradox is the fact that it was and remains difficult to describe the FLS as a concept, as a whole, as something bigger than the sum of its parts, without benefit of sufficient reflection upon the whole and without an articulation of the implicit educational theory underlying the development of individual modules. Nevertheless, our efforts

resulted in a series of materials in which each element not only reflects an example of the theory in practice, but each element (unit) addresses, as well, topics and skills which in composition with other units further clarify the implicit learning theory of the FLS. It is a whole with integration and composition.

Here we are faced with a third paradox. There is an important composition to the units in terms of their sub-topics, the ways the activities are constructed, their sequence, the pacing of the activities, and so on. The organization of individual modules should be understood because it reflects the wisdom provided by the developer regarding the sequence of understanding and the pace at which people can comprehend the issues at hand. There is an articulate construction underlying these units, and yet, if it is blindly followed word-for-word without reflection upon one's beliefs, without curiosity about what's happening to oneself, without sensitivity to what's happening to the people one is working with, you don't get what the unit has to offer. However, if you do start to get some idea of the rationale that underlines the organization and structure of the modules, it becomes possible to use the FLS to its full potential. One can combine activities or take them apart, isolate activities, transform them, replace them, eliminate them, and still come up with a valuable resource. We've seen this in our workshops because we've modeled that approach.

It should be noted, almost by way of caution and warning, that one of the first things that will appeal to a potential user of the FLS is not its bulk but rather the fact that you can pull things out of this bulk and avoid, for example, having people go through the recommended eight week courses on self-concept. However, it shouldn't be assumed that once you use little pieces

of the FLS, combine them and so forth, that you're operating in a way that is consistent with its potential. There has to be an understanding; and it's hard to describe how one should get that understanding. Thus the third paradox, simply to re-affirm it, is that it's quite possible to go through the modules as designed and still not fully use the material. Hence, it seems that one of the functions of the guide should be to, at least, warn people that they should keep a certain viewpoint in mind as they consider their uses of the FLS. And that thing to keep in mind we'll call the implicit theory of the FLS.

To review, this guide has the task of making the FLS available to people in the best way possible; making it available to educators, people who are training other educators, or people who are working in classrooms with children. The FLS has almost two levels of existence. On one level it can be described in reasonably objective terms; its length, number of units, the number of activities, and the sequencing of the activities, additional resources, the uses to which people have put it, the kinds of uses to which it can probably be put in terms of topics or in terms of format such as length of course hours and so on and so forth.

The second level of the FLS, addressed in Part II, is what it becomes when used in the best circumstances and what it's capable of becoming. That's more difficult to describe but it's something that deserves attention, because otherwise, the FLS may become much less than what was intended. In order to do its job, this guide must address both of these levels. We've attempted to give some sense of the deeper understanding that needs to be acquired by sharing a number of paradoxes. First, the problem of recreating an experience, a very personalized experience, via printed instructions. Secondly, the problem of describing what is true about the system as a whole rather than what is true about each individual unit.

And thirdly, the paradox that the materials can be used in any number of ways to provide the kind of experiences intended but only when one has acquired a deeper understanding of the philosophy underlying the FLS as a whole. There is no clear formula for insuring the resolution of these paradoxes, but the attempt to do this is the goal of this guide.

# PART I

# THE FLEXIBLE LEARNING SYSTEM AND ITS USE

## THE FLS AS PROCESS AND CONTENT

The following was given as the "keynote" address at one of our national FLS workshops. It addresses the content and process of the FLS by using the analogy of asking the question, "How does one get to the Olympics?" It examines the role of social interaction in the attainment of excellence in both practice and concept.

"I was going to talk about the Flexible Learning System as content, which in more common terms is simply, What does it have to offer and how do you get it? But in trying to figure out what I would say, I felt deprived of watching the Olympics, which is something I enjoy every time it comes around. How many of you have been watching the Olympics? Well it's a fascinating event. So I changed the topic from the FLS as process and content to, How does one get to the Olympics?

Here's three possible ways you can get to the Olympics. You could be an athlete or a coach or a judge. All three are concerned with the problem of excellence. The coach tries to help athletes become excellent in performance and the judge tries to determine whether excellence has occurred. All three have to be concerned with the problem of excellence in their jobs, whether that may be judging, coaching or running, and they have to have developed a fairly articulate concept of what excellence means. If any of you have tried to

follow the scoring process and procedures and have wondered why the commentators say something wasn't too good when you couldn't imagine how it could be better, you'll recognize the problem of establishing the concept of excellence. So not only do they have to be really good at whatever they're doing to get there, but the athletes, coaches and judges have to have in the back of their minds some common concern with what that excellence means.

Now the question is, how does excellence get achieved? Last night, an American athlete won a silver medal in the 100 meter hurdle. Over a drink at a party, a T.V. commentator said to the athlete, "Nobody expected you to be here at the Olympics. The people are all surprised that you are here. What do you think about it?" The athlete said, "I don't know how to respond to that exactly, but I'll tell you, it takes guts and determination. Anybody with guts and determination can get to the Olympics and you can't get there without it." Well, I think that's true -- it's true for the coach as well and it's probably true for the judge, and it's certainly true for the athletes, but it isn't enough, and one evidence of this fact is that none of them can do it by themselves. They are all inter-dependent upon each other.

Now this brings up the question of social interaction. In a sense you can say that the Olympics is as much a testimonial to the sophistication of the social structure as it is to the coordination of physiological activity. There is an immense amount of caring that goes on between all of the concerned parties, a caring by

which each of them advances further in their conception of excellence both as a concept and as a performance.

So, it's not just guts and determination. It's also a social phenomenon involving sharing. Now, when I say sharing, it's not quite as simple as common sense might lead you to believe. It is not a coach figuring out what has to be done and then telling the athletes what needs to be done and then the athletes doing what they're supposed to do and then the judge determining who crossed the line first, or in more complex cases, scoring a good dive, gymnastics routine, or horse jump. The sharing is not that simple. Actually there is a very elaborate set of hypotheses and concepts that are embedded in this. They are involved in all of the participants, i.e., the coach, the athlete and the judge. It involves all of them in the mutual achievement of excellence in practice, in improved performance and in the conception of perfect performance.

To grasp some sense of this elaborate set of concepts and proficiencies, let us imagine an athlete (this is a hypothetical athlete) who engaged in practice alone. This athlete practices alone, with no ability to represent that practice, no ability to share with others what's involved, and no ability to hear from others how they see that practice. Well, if you had that kind of athlete, s/he'd never get to the Olympics. Practice alone, doing something alone,

will not do it. There's a process of representing to oneself what you are doing, sharing with others and getting their reactions. There is a process of sharing other's conceptions about what you are doing, and all of that is very much a part of whatever is actually achieved. Let us further imagine what would happen to the evolution of a practiced activity if one could not direct it with reflection upon the past, which involves representation of past actions and again the ability to share and receive. Imagine no foresight, no idea about what would happen if I modified my starting stance or what happens if we do this or do that. In fact there is no way that the target of excellence could be pursued without a constant coordination of hindsight (or looking backwards) and forethought, or anticipation, with both representations and sharing. These issues are a necessary adjunct to all forms of excellence, and for all intents and purposes they are a necessary adjunct to all forms of knowledge, with very limited exceptions.

These process issues involve representing, sharing, reflecting upon the past anticipating the future. These are the things that take one to the Olympics. Now all of that has a cognitive slant to it and it leaves out the guts and determination. Before you can translate these processes into action, into doing something, whether it's reflecting or whether it's talking or whether it's representing, whether it's drawing figures or finding examples--before

you can do that, you have to have the energy to drive the system. You can call that energy, interest, guts and determination, dedication, or drive, but it won't happen unless there is something there to drive the action, and that is true of all knowledge as well as all forms of excellence.

OK, so now we've got process and energy. Now we need some content. So the question might be, what is the content of the Olympics? The content of the Olympics includes all the things shared, reflected upon and represented, anticipated and argued about. If you could list all of those things -- it would be a long list -- there is no way you could categorize them into a neat and immutable form. Imagine saying that the content of the Olympics are the events: the 100 meter dash, the 100 meter hurdle, the 100 meter backstroke, the 100 meter breast stroke, the 400 meter relay with four 100 meter dashes. This is the content. They're what's judged, what's trained for, what's studied. But you know that the coach who knows about the 100 meter dash (and the athletes and judges as well) also knows a great deal about what goes into the 100 meter hurdle and a great deal about what goes into the 400 meter relay. And there are some places where people study, of all things, the relationship between the 100 meter breast stroke and the 100 meter dash, because they are concerned with problems of the physiological system, its endurance, its oxidation, its consumption of energy. So all of this content, while separable in some sense, is highly interrelated, and the achievement of excellence demands a pursuit of the interrelationships.

Now, let's take process, and energy, and some of these categories. Even if we say the Olympics are the 100 meter dash, horses jumping, clay pigeon shooting, etc., that still won't tell you how to get excellence. That's just where you are applying your energy. That's just what you are representing, what you are doing. There is a lot of other important content as well. There's the concepts of balance, concepts of form, concepts of rhythm, concepts of endurance, concepts of experience, of energy, of training, and morale. These are things that coaches have to know about. That's their business -- to be able to know and talk about and share them, and figure out a way to transmit the ideas. And it is also what the teacher is concerned with. The teacher as a coach, the educator as a coach.

Now I am not going to try to take you too far with this. I am not going to try to talk about how teaching is the same as the Olympics. But it does bring me to talking about the FLS because in a sense, if you ask what it is, it is a guide for educational coaches. It is a set of things that look like books, but which are not books because what's there is more than what the words say. They are for educators engaged in their own professional growth and simultaneously engaged in helping others develop their own conception of education, their skills in educational practice, and their conception of excellence. It has a particular bias, a particular slant about it, a particular value orientation that needs to be recognized. This doesn't mean that you can't work with the materials if you

don't agree with its orientation, but if you want to understand what it's about, you have to understand its orientation. I would say that it's ultimately concerned with providing an education for children that encourages independent learning through self-discovery, through self-directed investigation. And it is fair to say that, as is true of almost all educational efforts, it is ultimately concerned with helping children turn into adults who are capable of directing their own learning and continuing to grow. What makes the FLS somewhat different is that it's concerned with developing independence and self-direction in children and in providing similar conditions for adults in their learning as well.

There is a word for all of this. The word is "heuristic," meaning the educational method by which students are allowed or encouraged to learn independently through their own investigation. That's heuristics. There is one catch with this definition, and that is the word "independently." Everything that I have said up to this point suggests that knowledge is not something that is acquired independently. I don't think there is an assertion that social interaction, that sharing, arguing, agreeing, and so on, is incompatible with the notion of independent and self-directed learning. In fact, education has the responsibility to address the problem of socially shared knowledge because its function is the transmission of culture, and that is the transmission of socially shared knowledge. So the question is how you put the notion of heuristics together with the notion of social interaction in such a way that learners develop responsibility

for their own learning and ultimately responsiblity for its application, either as children or as adults.

So what is the FLS process? Well, I'd say its process is a heuristic. That's what it's about. It's the activation of this heuristic in practice, the involvement of people like yourselves in the process of sharing, in the process of clarifying your own interests, determining representations, reflecting upon past experiences and anticipating outcomes of future actions, comparing and sorting, judging and evaluating, ordering, exploring, playing and whatever else you want to throw in. There is no general statement that automatically follows from putting this heuristic into practice. But I think if you were to try to find one, it would concern the problems of representation, the problems of sharing, the problems of reflection, the problems of sorting and ordering and so on. This, then, is the FLS process.

As to its content, you've got the same problem with the FLS as you've got with the Olympics. It's really hard to know how to cut it all up. For the purpose of this workshop, we have cut it into four topics. We've said we are going to talk about cognition, social interaction, culture, and classroom activities. And in other cases we've cut it up differently. You could say, there's four things that the FLS is about. Or you could say it is about the 17 titles you find on the covers. Or you could say it's about all sorts of activities that can be taken out and recombined. As in the Olympics, there are many

topics embedded in the FLS, having to do with how certain processes are realized, such as using criteria for judging, constructing examples, finding examples, and all of those things are also the contents of the FLS.

There's one thing particularly unique about the content of the FLS and that is that it is as much concerned with preparing teachers for a heuristic approach to education as it is with using heuristics to achieve its ends. We want to establish a climate for children and adults that is heuristic, that fosters independent and self-directed activity. And that in part is what the FLS is addressing. Topics like self-concept and communicating with parents, managing the classroom and problem solving are concerned with those conditions that foster that kind of education and in turn, they tell you something about what that kind of education is about in terms of your own learning. Part of the content of the Flexible Learning System is the process of the FLS.

I opened with the question, how do you get to the Olympics -- and I'll close with the question, how do you get to the FLS? And I'll say the answer is that you get to the FLS through a heuristic process designed to coach learners, to provide heuristic environments for children."

## FLEXIBLE LEARNING SYSTEM PRODUCTS

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The following consists of one-sentence and one-page descriptions of all FLS materials presently available. Those interested in sharing with others a brief description of the FLS content might consider these pages as material to be shared.

## SUMMARY OF FLEXIBLE LEARNING SYSTEM MODULES

ANALYZING CHILDREN'S BOOKS FROM A CHICANO PERSPECTIVE.....120 pp.

Written to give learners practice analyzing, evaluating, and selecting books and other educational materials for children of Mexican-American heritage.

ARRANGING THE CLASSROOM FOR CHILDREN.....252 pp.

Uses basic principles of interaction between space, materials, classroom activity, and educational goals to help early childhood educators achieve an optimal classroom arrangement for a variety of activities and child groupings.

COMMUNICATING AND WORKING WITH PARENTS.....196 pp.

Designed to give learners practice in verbal and written communication with parents; includes listening, problem solving, feedback, awareness of cultural and ethnic differences, parent surveys and mutual planning of parents' role in the classroom.

DEVELOPING CHILDREN'S SENSE PERCEPTION.....108 pp.

Written for learners interested in using sensory experiences to promote learning in the early childhood years.

ENRICHING LITERATURE EXPERIENCES OF CHILDREN.....184 pp.

Provides practice in developing personal criteria for selecting children's books and enriching story telling experiences.

EXPLORING CHILDREN'S THINKING: PARTS 1-3.....474 pp.

A series of three books exploring the development of logical operations in young children and their role in conceptual development. Accompanied by 4-part narrated color videotape series, The Growing Mind.

PART 1: THE DEVELOPMENT OF CLASSIFICATION.....196 pp.

PART 2: THE DEVELOPMENT OF ORDER RELATIONS.....190 pp. (SERIATION)

PART 3: THE DEVELOPMENT OF QUANTITATIVE RELATIONS.....98 pp. (CONSERVATION)

THE GROWING MIND: A PIAGETIAN VIEW OF YOUNG CHILDREN.....2 hrs.

Four 30-minute color videotapes illustrating the development of classification, seriation, conservation, and spatial reasoning in children four to eight years of age.

HELPING CHILDREN DEVELOP HEALTHY SELF-CONCEPTS.....210 pp.

Helps learners understand how the development of a healthy self-concept is affected by classroom practices.

AN INTRODUCTION TO EARLY CHILDHOOD EDUCATION.....122 pp.

Designed to help learners clarify and develop their own educational philosophy and its implications for teaching practices in early childhood education.

MANAGING THE PRESCHOOL CLASSROOM.....98 pp.

Provides training on using classroom planning to avoid management problems and on techniques to reduce inappropriate behavior in the classroom.

PROBLEM SOLVING WITH CHILDREN.....106 pp.

For persons interested in helping children develop problem-solving skills and attitudes and with helping children assume more responsibility for classroom problem-solving.

SELECTING CHILDREN'S BOOKS FROM A BLACK PERSPECTIVE.....232 pp.

Designed to give learners an understanding and rationale for using a Black perspective to analyze and evaluate the illustrations and written content of children's books.

TEACHING CHILDREN TO INTEGRATE LANGUAGE EXPERIENCES.....248 pp.

Provides a teaching process with techniques for helping children use and extend their personal experience in language arts activities.

UNDERSTANDING CHILDREN'S PLAY THROUGH OBSERVATION.....106 pp.

Focuses on the importance of play to child development, and types of adult intervention in children's play. An accompanying 28 minute 16 mm color-sound film, Observing Children's Play, is important to this unit.

USING TOYS AND GAMES WITH CHILDREN.....248 pp.

Written for learners who want to become more skilled in using toys and games to help children between three and eight years of age learn basic skills and concepts.

WORKING WITH CHILDREN'S CONCEPTS.....136 pp.

Explores conceptual learning within a framework of the child's natural representations and sharing of interests and the developmental organization of represented knowledge.

**the flexible learning system**

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| WORKING WITH CHILDREN'S CONCEPTS | $ 4.95 | | |

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## ANALYZING CHILDREN'S BOOKS FROM A CHICANO PERSPECTIVE

Oscar Uribe, Jr. and
Joseph S. Martinez

This unit helps learners analyze, evaluate, and select books and other materials for use in classrooms for young children of Mexican-American heritage. Some teachers have used it as a general guide for analyzing materials for their representation of Chicano history and culture.

The introductory material explores the impact of children's books on self-concept and children's attitudes toward other ethnic groups. Evidence is presented concerning the value of multi-ethnic books in changing attitudes toward minority people.

Evaluation criteria are presented in two sections. In section one, learners explore guidelines for detecting culturally biased content. The issues of overgeneralization, evaluative and demeaning statements, and ethnic stereotypes provide a framework for analyzing and evaluating written text as well as illustrations. Section two explores the importance of recognizing culturally accurate information, language appropriateness, accurate source and treatment of material, and factual errors.

Each section contains examples of pictures, illustrations and text taken from books often recommended for use with the Chicano child. The learner can compare his/her application of the guidelines with the authors' evaluations. The unit concludes with self-assessment activities in which learners rewrite sample paragraphs after examining them for distortions specified in the guidelines.

A variety of reference bibliographies provide additional information and examples for further evaluation and topic exploration.

Related FLS topics: Communicating and Working with Parents; Selecting Children's Books with a Black Perspective; Enriching Literature Experiences of Children; and Helping Children Develop Healthy Self-Concepts.

ARRANGING THE CLASSROOM
FOR CHILDREN

Keith Alward

This unit is designed to help early childhood educators achieve an optimal classroom arrangement for a variety of activities and child groupings. It addresses basic principles of interaction between space, materials, classroom activities, and educational goals. It is particularly suited to educators interested in providing an open-education setting where children assume responsibility for their own activities. It can be useful for teachers of older children as well.

Part I introduces six basic classroom areas described by 12 variables covering size, boundaries, materials, working surfaces, and functions. Exploration of the relationship of variables to classroom operations leads learners to the solution of management problems through classroom arrangement and modification of the six basic areas to suit individual needs.

Part II provides an illustrated and descriptive guide to physical facilities and resources. Topics covered are: storage, working surfaces and seating, the floor, raised work and play platforms, enclosed areas, room and area dividers. References include over 60 publications, films, and additional resource addresses.

This book can be used individually or with fellow learners. Chapters contain a topic introduction, learner-activities, and a follow-up discussion. Learner-activities include classroom observations, simulation, and decision-making problems. Ripout activity forms are provided for recording activity results.

The chapters are integrated to help learners: recognize, describe, and evaluate six fundamental types of classroom areas; know how to manipulate area variables to improve the function of the classroom.

Additional FLS resources on this topic: Managing the Preschool Classroom; Problem Solving with Children; Helping Children Develop Healthy Self-Concepts; Understanding Children's Play Through Observation; and An Introduction to Early Childhood Education.

COMMUNICATING AND
WORKING WITH PARENTS

Angela Garcia,
Margaret Robinson,
Dennis Sims

This unit is designed to give learners insight into verbal and written communication with parents.

The ten sessions in this unit have been designed as workshops. Each provides opportunities to build upon skills learners already have and to practice new skills in workshops, family, and work settings. Each session has a central theme, and builds upon the preceding sessions.

Unit themes cover: perception and feedback in communication; communication and awareness; parent roles in the program; facilitating techniques; parent surveys.

Each session begins with sharing and reviewing individual experiences in previous activities. Opportunities are provided to explore the relationship of themes to the learner's personal interests.

Learning activities provide an opportunity to practice several important communication skills: how to respond to an emotional or critical outburst from someone else; how to encourage greater parent participation in your classroom; how to respond when you feel misinterpreted; how to recognize non-verbal messages; and how to set reasonable goals that you can effectively implement.

Other FLS materials relating to this topic: Problem Solving with Children; Analyzing Children's Books from a Chicano Perspective; Selecting Children's Books with a Black Perspective; Using Toys and Games with Children; and Helping Children Develop Healthy Self-Concepts.

## DEVELOPING CHILDREN'S SENSE PERCEPTION

Bethanie Gilbert and
William Finzer

This unit is intended to help practitioners use sensory experiences to promote sensory learning in the early childhood years. The focus on sensory-based learning activities is particularly well suited to beginning teachers and paraprofessional staff.

A sequence of learning activities for each sense mode include texture, weight, size-shape, taste, hearing, and sight. The learning-activity sequence involves a sensory experience for adults, constructing a sense-word list, exploring and constructing learning objectives for children, diagnosing sensory skills in children, and creating sense-modality learning experiences for children.

Learning objectives for children incorporate experiences in naming, matching, comparing and contrasting, classifying, ordering, describing, identifying, tracing, predicting, and explaining. Learners are guided in constructing activities tapping these skills in each of the sense modes. Diagnosing children is explored in the context of natural observations and adult probes during normal classroom activities. Learners are guided to develop their own objectives and diagnostic strategies.

Individual and small group activities, classroom observations, and working with children are integrated to achieve: skill in promoting cognitive growth through sensory experience; skill in diagnosing the child's conceptual uses of senses; skill in using diagnosis to plan and provide sensory activities that support cognitive growth; the development of a sense-perception curriculum.

Additional FLS resources on this topic: Exploring Children's Thinking (three-volume series); The Growing Mind (four videotapes); Working with Children's Concepts; Using Toys and Games with Children; Teaching Children to Integrate Language Experiences; An Introduction to Early Childhood Education; Problem Solving With Children.

# ENRICHING LITERATURE EXPERIENCES OF CHILDREN

JoEllyn Taylor

This unit explores the potential uses of children's literature and helps learners develop guidelines for the selection of books and methods for planning and facilitating children's experiences with literature. The material is written for those who work with children four to eight years of age.

A variety of short articles and learner activities explore the uses of literature, its importance, and its relationship to self-concept, personal values and personal experiences. Initial criteria for book selection and personalized literature experiences are explored within a wide range of available children's books. Learners are guided to clarification and development of their own values and criteria and their use in developing lesson plans for literature experiences.

Learner activities involve thought problems, the generation and application of criteria to books and lesson plans, role-playing, group discussions and sharing, and exploration of available literature. This unit is designed for use in a group setting and includes self-assessment activities provided throughout the unit.

Related FLS topics include: Helping Children Develop Healthy Self-Concepts; Teaching Children to Integrate Language Experiences; Analyzing Children's Books from a Chicano Perspective; and Selecting Children's Books with a Black Perspective.

EXPLORING CHILDREN'S THINKING:

Part 1, Classification
Part 2, Seriation
Part 3, Conservation

Keith Alward and Associates

This three-volume series introduces the learner to children's thinking and its progressive patterns of organization between three and eight years of age. This series is based on Jean Piaget's work and is written for those interested in children's thinking and the application of Piaget's theory to early childhood education.

This series covers the topics of Classification, Part 1; Seriation (order relations), Part 2; and Conservation (quantitative relations), Part 3. The preconceptual, intuitive, and concrete-operational stages of development are explored in each of the topic areas. The development of classification is revealed in how children use judgments about similarities and differences and the concepts of "some" and "all". Order relations (seriation) concern how children reason about sequences such as orders from least to most. Quantitative relations concern all notions of units and number and their application in such areas as measurement and arithmetic. The development of quantitative relations is examined with the use of conservation tasks which reveal children's gradual understanding that the arrangement of objects does not affect their amounts.

Learner activities consist of thought-problems, role-playing, child interviews, discussions and sharing, reading, and viewing the videotapes (see The Growing Mind). Pull-out guided interview forms are provided for all interviews. The material is designed to be used with a group of learners although it should be informative to the independent learner. The series contains an introduction to Piaget and his general theory, its educational implications, and transcripts of illustrative videotapes. There is also an annotated bibliography describing most of Piaget's translated works and over 50 other publications and films.

Learners will gain skill and practice in working with children to explore their thinking. Learners will also gain a general insight into the developmental limitations as well as the richness of children's thinking and its relationship to the goals and practices of early childhood education.

Other related FLS topics: Problem Solving with Children, The Growing Mind (four videotapes); Working with Children's Concepts; Using Toys and Games with Children; and Developing Children's Sense Perception.

THE GROWING MIND:
A PIAGETIAN VIEW OF CHILDREN

Keith Alward

This is a set of four, 30-minute, broadcast-quality, color videotapes covering the mental development of class, order, quantitative, and spatial relations in children between four and eight years of age. Each of the videotapes is narrated and self-contained. Three of the videotapes are complemented by corresponding FLS books entitled Exploring Children's Thinking. The fourth videotape (spatial relations) is not accompanied by written material.

The set illustrates a variety of interviewers working in a one-to-one setting with 13 children within the preconceptual, intuitive, and concrete-operational stages of mental development. Many of the same children appear in several of the videotapes, permitting comparisons of performance in different knowledge areas. Likewise, the same child often appears in different tasks within the same knowledge area. Presentation of 12 classic Piagetian tasks are illustrated with a clear analysis of the symptoms and organization of the performance within the three stages.

The Growing Mind set is availabe in 1/2 inch reel-to-reel and 3/4 inch videotape cassettes. The videotapes are entitled: The Development of Classification (30 minutes); The Development of Order Relations: Seriation (28 minutes); The Development of Quantitative Relations: Conservation (32 minutes); and The Development of Spatial Relations (29 minutes).

Additional FLS material related to these topics: Using Toys and Games with Children; Developing Children's Sense Perception; An Introduction to Early Childhood Education; Communicating and Working with Parents; and The Growing Mind.

# HELPING CHILDREN DEVELOP HEALTHY SELF-CONCEPTS

Natividad DeAnda

This unit is for learners who want to develop an understanding of the effects of classroom situations on children's self-concepts. What is a healthy self-concept? How do teaching practices affect children's self-concepts? When are teacher practices demeaning, restricting, overrating, or enhancing to children's self-concepts? These are the questions addressed in this unit.

One of the points emphasized is that children's self-concepts develop as they take credit for what they do and what they are as individuals, and as they integrate the results of new experiences into beliefs about themselves.

The first 60 pages contain guidelines and lesson plans for conducting an eight-session course or series of workshops. These are followed by three approximately 40-page readings about the nature of self-concept and its development with examples and discussions of classroom situations.

The learner progresses through the workshop series in a sequence of steps leading to a deeper understanding of the influence of adult behavior on children's self-concepts. Learner activities include identifying positive/negative classroom situations, learning to use specific criteria for detailed analysis of similar teaching situations, applying these to actually observed classes, and formulating and discussing ways to improve classroom practices. Throughout the sessions, individual ratings and analyses of teaching are shared with partners or with a group. This approach adds enrichment from the various perspectives.

Other related FLS topics: An Introduction to Early Childhood Education; Teaching Children to Integrate Language Experiences; Problem Solving with Children; Managing the Preschool Classroom; Communicating and Working with Parents; Analyzing Children's Books from a Chicano Perspective; Selecting Children's Books with a Black Perspective; Arranging the Classroom for Children; and Using Toys and Games with Children.

AN INTRODUCTION TO EARLY CHILDHOOD EDUCATION

Judith Johns Hubner and
Marlene Cresci

This unit is designed to help learners clarify and develop their own educational philosophy and its implications for teaching practices in early childhood education. It explores a variety of early childhood education models and provides a framework for understanding the educational philosophy and practices of the Flexible Learning System

The unit focuses on the analysis of four educational models representing a broad range of practices in contemporary programs: The Responsive Model; The Open Education Model; The Behavior Analysis Model; and the Engelmann-Becker Model. An earlier Laboratory product, the Early Childhood Information Unit, is an audio-visual print package which provides an overview of the four models. It is an integral part of this unit.

Learner activities include: reading, group discussions, presentations, viewing filmstrips, observing programs, and developing and participating in learner-designed activities. Unit activities are integrated to accomplish: knowledge of model programs in early childhood education; clarification of personal values/goals/priorities in working with children; articulation of a personal model of early childhood education.

Additional FLS materials related to this topic: Arranging the Classroom for Children; Managing the Preschool Classroom; Problem Solving with Children; Helping Children Develop Healthy Self-Concepts; Understanding Children's Play Through Observation; Using Toys and Games with Children; Developing Children's Sense Perception; and Communicating and Working with Parents.

MANAGING THE
PRESCHOOL CLASSROOM

Judy Brown

This unit provides training on how to use classroom planning to avoid management problems and the use of techniques to reduce inappropriate behavior in the classroom.

Management is approached as the process of organizing and structuring the classroom, its activities, and the responsibilities of staff and children. Management is directed towards helping children assume responsibility for their own behavior in a climate that maximizes individual freedom and minimizes disturbances in the learning environment.

Criteria for classroom management, establishing rules and limits, scheduling, and the provisioning and use of materials are explored in the context of minimizing the occurrence of management problems. Learners are given practice in developing rules and limits, arranging classroom activities, developing daily plans, demonstrating the arrangement of materials, and extending and adapting classroom materials to meet individual needs.

Learners are also helped to know how to handle inappropriate behavior when it occurs. Topics covered include: determining the problem; anticipating and re-directing inappropriate behavior; attending to positive behavior; contingent use of classroom activities; using time out; why punishment is an inappropriate form of classroom management.

The unit is written to be used with a group of fellow learners and a trainer, or individually. Many of the activities assume that learners are working in or have easy access to preschool classrooms. Learner activities involve classroom observation, demonstration, working with children, thought and problem-solving activities.

Other FLS units related to this topic: Helping Children Develop Healthy Self-Concepts; Arranging the Classroom for Children; Problem Solving with Children; An Introduction to Early Childhood Education; and, Understanding Children's Play Through Observation.

PROBLEM SOLVING
WITH CHILDREN

Joanne Yinger

This book was written for persons interested in helping children develop problem-solving skills and attitudes. The focus is on offering adults an opportunity to develop skills in helping children assume more and more responsibility for their own problem solving and their own learning. Persons interested in increasing their own problem-solving skills or helping children and adults become better problem solvers should find this book informative. While it was designed to be used with a group of learners, it is capable of independent use.

Problems are treated as opportunities to learn where individuals or groups want something changed, are personally affected, and in a position to assume responsibility for solving the problem. Problems in the cognitive, social and personal domains are considered. Skills in problem identification and clarification, idea generation, implementation of solutions, and evaluation of results are explored.

Over half of the book is devoted to teaching techniques for guiding children in problem-solving activity. Techniques are grouped under: "tuning in", "drawing out", guiding and supporting the creation of possible solutions. Skills involve: listening, paraphrasing; questioning; creating analogies and imagery; connecting "far-out" ideas to the reality of the problem to be solved.

Recall of personal problem-solving experiences, observations of children, classroom practice, and roleplay are embedded in 26 learner activities. Rich examples of a wide range of classroom problems are interspersed among learner activities.

Related FLS topics: An Introduction to Early Childhood Education; Arranging the Classroom for Children; Using Toys and Games with Children; Developing Children's Sense Perception; Exploring Children's Thinking; The Growing Mind; Helping Children Develop Healthy Self-Concepts; Understanding Children's Play Through Observation; Managing the Preschool Classroom; Communicating and Working with Parents; and Working with Children's Concepts.

SELECTING
CHILDREN'S BOOKS WITH A
BLACK PERSPECTIVE

Francione Lewis

This book was written to enable learners to understand and to use a Black perspective in evaluating the illustrative and written content of children's books.

The introduction stresses the importance of appropriate reading materials to enhance the learning of both Black and non-Black learners who may be influenced by expressed attitudes about Black people. A Black perspective is applied to illustrations and text to determine how the Black experience is portrayed. Learners interested in expanding their understanding of Black experiences and their relevancy to classroom literature should find this work informative.

A variety of criteria derived from a broad range of cultural characteristics are used to analyze and evaluate illustrations and text. Learners are guided in their application of criteria to selected books and provided with opportunities to check themselves against the author's evaluations. Opportunities for agreement and disagreement are encouraged, along with opportunities to recognize that all cultures offer a unique perspective.

Articles and stories by a variety of authors contribute to an understanding of Black experiences. The concept of Black perspective is derived from an historical analysis. An understanding of this history is acquired through historical overviews, discussions with other learners, and the use of criteria for judging the historical accuracy of written material. References to resource materials in the area of Black experiences and guidelines for supplementing inadequate materials are covered.

Books used for application of the unit criteria are: Evan's Corner, Hill, Elizabeth S., New York, Holt Rinehart and Winston, 1967; The Black BC's, Clifton, Lucille, New York, E. P. Dutton & Co., Inc., 1970; Goggles, Keats, Ezra, Jack, New York, Collier Books, 1969; Song of the Empty Bottles, Molansky, Osmond.

Other FLS units related to this topic: Analyzing Children's Books from a Chicano Perspective; Helping Children Develop Healthy Self-Concepts; Enriching Literature Experiences of Children; and Communicating and Working with Parents.

TEACHING CHILDREN
TO INTEGRATE
LANGUAGE EXPERIENCES

Margot Biestman

This unit introduces the concept of teaching language arts in relationship to the development of a child's healthy self-concept. It is a practical book. It provides techniques for helping children integrate their personal experience in language arts activities. Since the focus of the unit is on the process of teaching and learning, what is taken from the unit may be applied to learning activities other than language arts. The unit provides a unique view into the dynamics of creative production and its representation.

It is divided into four sections which may be taught separately or used in sequence. The sections include opportunities for a child to assimilate or integrate his/her own experiences in listening, fantasy, memory of familiar past experiences, and spontaneous classroom activities with expressions in art, movement-dance, and written and oral language. Children are given the opportunity to gain prereading and reading skills from these experiences. Each section provides the learner with a guided sequence of activities which includes: presentation of criteria for an integrated language experience; sharing, reviewing and evaluating their experience; planning activities for children based on their experience; implementing their plans; evaluating their implementation and children's responses. The learner has an opportunity to move from using plans as designed in the unit with modifications to extending and further adapting plans for follow-up activities for children, and then using elements from the teaching process in designing plans for their own activities. May rich examples of plans adapted by learners are provided throughout the text and in the separate learner's resource booklet. Handy forms provide methods for learners and instructors to evaluate activities. Beginning and advanced levels of performance are suggested for all activities and are designed for children from preschool to third grade.

Other FLS units related to this topic: Developing Children's Sense Perception; Helping Children Develop Healthy Self-Concepts; Working with Children's Concepts; and Enriching Literature Experiences of Children.

UNDERSTANDING CHILDREN'S PLAY
THROUGH OBSERVATION

Judy Brown

This is a unit on how to observe child's play and on the classroom conditions that promote productive play activity. The unit focuses on developing skills in observing and analyzing children's play and relating them to appropriate adult roles.

The unit activities and an accompanying film are organized to help learners develop specific play intervention strategies such as when to ask children questions, provide information, and redirect play. Observation forms are provided.

The unit is designed to be used with a group of fellow learners. Active small group discussion is an important aspect of the learning process for this unit. Completion of this unit should enable learners to: discuss why play is important for a child's growth and development; make objective descriptions of a child's play activity; determine when to provide additional resources for increasing children's learning through play; determine when to intervene, extend, or adapt the play situation to promote children's learning; create a classroom environment to achieve a set of objectives; determine when to participate as a co-player and when to redirect the play situation.

The unit is accompanied by a 28-minute, 16-mm, color-sound film entitled Observing Children's Play. This film is a non-narrated sequence of children engagin in social play. The majority of unit activities require making observations from the film

Additional FLS resources on this topic: An Introduction to Early Childhood Education; Arranging the Classroom for Children; Helping Children Develop Healthy Self-Concepts; Working with Children's Concepts; Managing the Preschool Classroom; and Problem Solving with Children.

## USING TOYS AND GAMES WITH CHILDREN

Nimnicht, Brown, Johnson, Addison, Rosenau, Adcock, and Houdyshell

This book was written for learners who want to become skilled in using toys and games to help children (between three and eight years of age) learn basic skills and concepts. It is a practical and systematic introduction to working with children for those who are new to teaching and for paraprofessional and volunteer staff.

A total of 18 toys and 82 games provide a range of experiences in: classifying, ordering, spatial reasoning, patterning, thinking inductively and deductively, problem solving, memorizing, decoding and encoding language, sensing and numerating. Ordered sequences of learning episodes (games) provide specific learning experiences with each of the toys.

A basic set of eight toys is accompanied by an introductory film plus a film strip and an audio cassette for each toy. Other games are illustrated in cartoon strips. All games are described in short and easily read steps.

Activities involve working with children, viewing audio-visual materials, making classroom observations, extending and modifying existing games.

Learners acquire skills in modeling precise language, contributing to the development of healthy self-concepts, creating conditions for spontaneous learning, helping children develop problem-solving skills, and working with children responsively.

Additional FLS materials related to this topic: An Introduction to Early Childhood Education; Problem Solving with Children; Developing Children's Sense Perception; Helping Children Develop Healthy Self-Concepts; Working with Children's Concepts; Exploring Children's Thinking (three volumes); and The Growing Mind (four videotapes).

WORKING WITH
CHILDREN'S CONCEPTS

Keith Alward

This unit is about concepts and their character in the early childhood years. It concerns children between two and eight years of age. This is not a how-to-do-it book. It focuses on helping adults understand the nature, organization, and development of concepts and the relationship of these to represented and shared interests. Anyone interested in concepts should find this book informative.

Concepts are viewed as representable, shareable, and as organized knowledge formulated around interests. They are susceptible to agreement and disagreement, and, in some cases, capable of being forgotten.

Familiarity with the series, Exploring Children's Thinking, provides an important foundation for understanding this book. An understanding of the mental development of classification skills should be considered a prerequisite. Both the organization and development of concepts are strongly related to the child's understanding of class and order relations.

Learner activities involve analyzing adult concepts and their representation, adult classification activities, interviews of children, classroom observation, and thought problems. Written material provides an introduction and follow-up to each activity. The appendix contains notes on clinical interviewing and a bibliography of over 60 publications and films. Activities are integrated to help students learn: ten characteristics of concepts; how concepts are organized; how the organization of concepts changes with mental development; how concepts are represented; how interests determine the formation of concepts; guidelines for educational practice that support conceptual growth.

Other FLS materials related to this topic: An Introduction to Early Childhood Education; Exploring Children's Thinking; The Growing Mind; Developing Children's Sense Perception; Using Toys and Games with Children; Understanding Children's Play Through Observation; Problem Solving with Children; and Teaching Children to Integrate Language Experiences.

## FLEXIBLE LEARNING SYSTEM CONTENT

This section concerns the FLS units and their interrelatedness. It's an exploration of the FLS content in a manner suggested in the section titled, "The FLS as Process and Content". It addresses a variety of educational concerns and their relationship to the FLS materials.

A Sufi story...

> "A wise man, the wonder of his age, taught his disciples from a seemingly inexhaustible store of wisdom.
>
> He attributed all his knowledge to a thick tome that was kept in a place of honor in his room.
>
> The sage would allow nobody to open the volume.
>
> When he died, those who had surrounded him, regarding themselves as his heirs, ran to open the book, anxious to possess what it contained.
>
> They were surprised, confused and disappointed when they found that there was writing on only one page.
>
> They became even more bewildered, and then annoyed, when they tried to penetrate the meaning of the phrase that met their eyes.
>
> It was: "When you realize the difference between the container and the content, you will have knowledge."

> "A huge organization, a single technique, and slick publications that show scientific proof of its goodness make an attractive package. But too often when these wrappings go, there is little left of substance. The old Sufi story says it well." (Robert E. Ornstein, Psychology Today, September 1976).

The content of the Flexible Learning System is not easily specified. At its core, the question involves the character of competencies in general, and their interrelationship in the practice of competent teachers. At the surface, the FLS unit titles are its content. The previous section on "FLS Products" provides a reasonably succinct description of the units. However, to see the content

of the FLS as a whole requires further exploration of the interrelationships between the units.

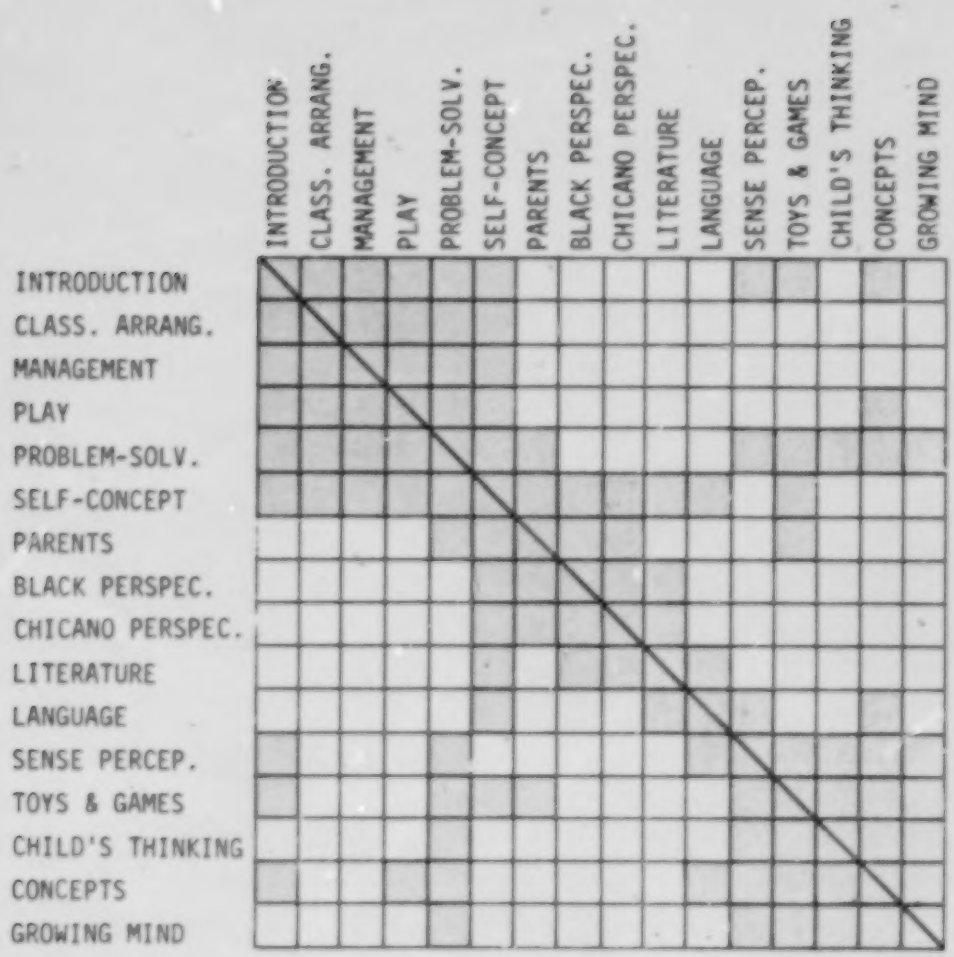
The interrelationship of the units can be talked about in a number of ways. Theoretically, one could relate gains in learner performance to the character of training (i.e., which units were trained on, the sequence of units, etc.) and thus determine the empirical interrelationships among the various competency titles in the FLS. In the absence of such empirical measures we can still discuss the relationships among the units on the basis of our conception of the competencies of early childhood practitioners, the direction and orientation of the material within each of the respective titles, and the relationships that emerged in our experiences with training, and in what others report.

Figure 1 represents some of the relationships among the titles of the units themselves. This representation is similar to the correlational matrix, expressing the interrelatedness among a set of elements. The order of the units in Figure 1 has been arranged so that units sharing similar content and orientation are placed next to each other. For example, the unit on "Play" is close in content and orientation to the units on "Management" and "Problem-Solving." Figure 1 may thus be read by taking a unit title such as "Introduction" and reading across and seeing which other units it relates to.

The relationships between the units are not necessarily reciprocal. For example, the "Parent" unit does not tell one how to use toys and games with children but the unit on "Toys and Games" addresses how to teach parents to use toys and games in the classroom. In the following section we will discuss only those cells which fall to the right of the diagonal in Figure 1.

Fig. 1

Relationships Between FLS Units



1. INTRODUCTION TO EARLY CHILDHOOD EDUCATION:

The "Introduction" unit is concerned with contemporary approaches to early childhood education in America. One of the models presented for discussion is the Responsive Education model from which the FLS derives many of its views. Since the "Introduction" unit is designed to help learners develop and clarify their own views about educational practice, it necessarily relates to all the other units. Clarifying ones' views of education involves considering each of the respective topics in the FLS. However, as shown in Figure 1, in terms of its actual content the "Introduction" unit is directly related to topics such as classroom arrangement, classroom management, children's play, problem-solving and self-concept, etc.

2. ARRANGING THE CLASSROOM FOR CHILDREN:

The "Classroom Arrangement" unit is concerned with the relationship between the organization of the classroom space and materials and the functioning of the classroom. This ultimately concerns the objectives of the program, the concerns and principles that operate and the kinds of experiences you want children to have in the classroom. Classroom arrangement is specifically related to the issues of classroom management because the articulation of space and materials provides a structure for classroom activities. It relates also to the conditions that support childrens' play and problem-solving. Classroom arrangement can also be seen to encourage the development of a healthy self-concept by providing enough structure to help children become more self-directing and aware of the results of their own activities.

3. MANAGING THE PRESCHOOL CLASSROOM:

The "Management" unit concerns children's play as well as problem-solving

and self-concept. The focus of the "Play" unit is on directing and facilitating children's play and often involves management issues. "Problem-Solving" involves helping children take ownership for their own problems and for their solution. "Self-Concept" is directed to the conditions that operate in the classroom that support children finding out about themselves in such a way that their self-esteem is enhanced rather than deprecated. The problem of management is, in part, a problem of creating optimal conditions in the classroom necessitating restrictions, but doing so in such a way that children are provided with conditions supportive of a healthy self-concept and a problem-solving perspective.

4. UNDERSTANDING CHILDREN'S PLAY THROUGH OBSERVATION

The "Play" unit is related to the "Problem-Solving" unit in that the re-direction of play often involves problem-solving in terms of helping children find alternative solutions to desires and conflicts in play. It also relates to the "Self-Concept" unit in that productive play provides one of the conditions that supports the development of a healthy self-concept. It is also related to the unit on "Concepts" in that the latter is concerned with the observation of conceptual representation in the child's activities, and one of the richest fields for observing this is in the child's play.

5. PROBLEM SOLVING WITH CHILDREN

The "Problem Solving" unit relates to the unit on "Self-Concept" in that the process of helping a child assume responsibility for solving problems is one of the conditions that supports the development of a healthy self-concept. It is related to the unit on Communicating and Working with Parents, in two ways: (1) it is concerned with involving parents in the problem solving of the classroom; and (2) it is concerned with

interpersonal communication. The content of units dealing with cognition such as sense-perception, toys and games, and concepts, are all related to providing children with opportunities to solve problems in the cognitive and sensory-motor domains. The unit on "Exploring Children's Thinking" and the accompanying "Growing Mind" videotapes illustrate how to look at children's intellectual development in a way that involves the child's own problem-solving.

6. HELPING CHILDREN DEVELOP HEALTHY SELF-CONCEPTS:

The "Self-Concept" unit addresses many of the issues involved in working successfully with parents. It is also concerned with events related to the underlying themes of the units on Black and Chicano perspectives in literature and the unit on "literature" itself. All of these units incorporate aspects of self-concept as related to how children's experiences, and the groups with which they identify, are reflected in classroom literature in ways supportive of a healthy self-concept. The "Language" integration unit is concerned with language experiences for a similar purpose. The unit on "Toys and Games" addresses the problem of self-concept in working with toys and games with children (e.g., the use of autotelic games).

7. COMMUNICATING AND WORKING WITH PARENTS

The unit on Communicating and Working with Parents is related to the units on Black and Chicano perspectives because Black and Chicano parents can be understood and related to more openly and honestly if there is sensitivity to the frame of reference parents may bring to scho[illegible]. Black and Chicano parents are a focus of this unit because of the historical relationship of the FLS with the Responsive Education Follow Through program. The "Toys and Games" unit is related in that some of its sections originated

in one of our earlier Laboratory programs, the Parent-Child Toy-Lending Library. It constitutes another possible vehicle for parent involvement in the classroom.

8. SELECTING CHILDREN'S BOOKS WITH A BLACK PERSPECTIVE:

   The unit on Selecting Children's Literature with a Black Perspective is related to the units on "Chicano Perspectives" and "Enriching Literature Experiences," because both address the classroom selection of literature with respect for the experiences of the children in the classroom.

9. ANALYZING CHILDREN'S BOOKS FROM A CHICANO PERSPECTIVE:

   By relating cultural experiences to their common reflection in literature, the unit on "Chicano Perspective" is closely related to the unit on "Black Perspective" as well as to the "Literature" unit.

10. ENRICHING LITERATURE EXPERIENCES OF CHILDREN:

    The "Literature" unit is related to the "Language" unit in that the "Language" unit attempts to incorporate and to provide linguistic experiences relevant to the experiences of the child.

11. TEACHING CHILDREN TO INTEGRATE LANGUAGE EXPERIENCES:

    The "Language" unit is related to sense-perception in that the sub-strata of a great deal of linguistic activity is encoded in sensory and perceptive experiences. The "Language" unit also relates to the unit on "Concepts" in that the latter is concerned with the character of the child's organization and representation of his/her concepts.

12. DEVELOPING CHILDREN'S SENSE-PERCEPTION:

    The "Sense-Perception" unit involves a variety of activities, many of which are amplified by the material in the "Toys and Games" unit. A number of the sensory perceptual activities involve children in sorting, classifying, and ordering and these are the topics of the unit on "Children's Thinking."

Perceptual experiences also provide many of the attributes of children's concepts and therefore are related to the unit on "Concepts." The Growing Mind series, illustrates the sensory character of children's mental development, in classification, seriation, and other types of activity.

13. USING TOYS AND GAMES WITH CHILDREN:

For similar reasons, the unit on "Toys and Games" is related to "Children's Thinking." That is, many of the toys and games require the operations and experiences described in the material on children's thinking. Similarly, the "Toys and Games" unit is designed to develop concepts. The unit on "Concepts" provides additional insight into this process.

14. EXPLORING CHILDREN'S THINKING (Parts 1, 2, and 3):

The material on "Children's Thinking" may in many ways be regarded as a pre-requisite to an understanding of the unit on "Concepts," in that concepts involve an organization of thought which is the focus of this unit. The accompanying "Growing Mind" set of videotapes illustrate the character of this organization and its development.

15. WORKING WITH CHILDREN'S CONCEPTS:

The unit on "Concepts" is related to the Growing Mind videotape series in that the latter is an illustration of the organization of conceptual thought and the changes in its organization through development.

By looking at the shaded areas in Figure 1, one can see that there are clusters of units which seem to be more highly related to themselves than to other units. For example, the first five units tend to be highly interrelated in terms of their respective concerns. It might well be that each of these units, in some fashion, contributes to an understanding of the other units within the cluster. A second cluster involves the units of self-concept,

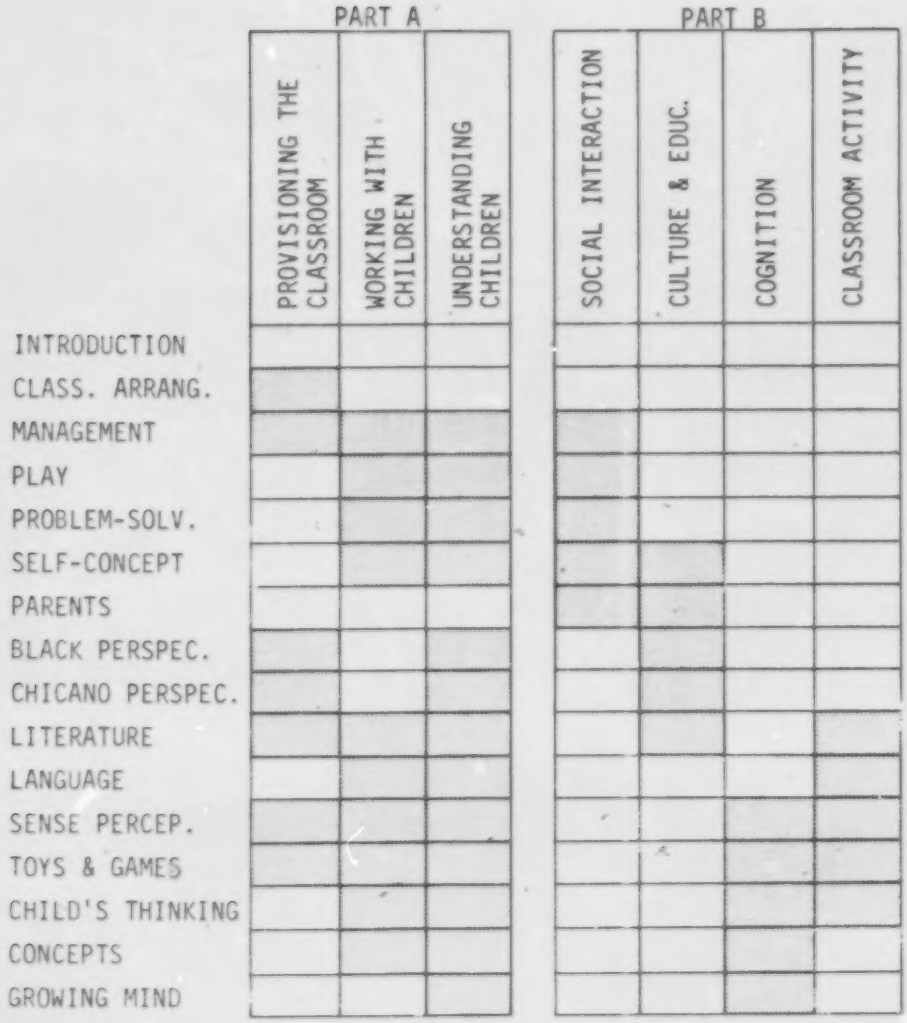
parents, Black perspective, Chicano perspective, literature, and language. And a third cluster involves the areas of sense perception, toys and games, children's thinking, concepts, and the growing mind. It must be noted that each cluster is not empirically determined; that is, they are not the results of measures of people's skills but they reflect interrelationships of their content.

During the developmental phase of the FLS we specified another way of clustering the units into three broad, overlapping categories: (1) "provisioning the classroom"; (2) "working with children"; (3) "understanding children." As shown in Figure 2, Part A,the contents of "provisioning the classroom" involved those things put into the classroom and the character of their organization. These units included classroom arrangement, management, use of literature, etc. The cluster titled "working with children" was essentially focused on the interactive process of working with children, i.e., the character of the relationship between adults and children. This topic included the units on management, play, problem-solving, self-concept, etc. The category on "understanding children" is closely related to "working with children." This reflects an underlying theme in the FLS that any interaction with children is benefited by an understanding of children and that an interaction carried out with sensitivity yields further understanding of children.

Still another way of grouping FLS materials was used during the last FLS workshop in 1976. Four global topic-areas were arbitrarily selected as a way of allowing participants to relate their own interests and needs to the material as well as seeing the interrelatedness of the material. These topics were "social interaction", "culture and education", "cognition", and "classroom activities" (See Figure 2, Part B). The focus on "social interaction"

Fig. 2

Organization of FLS Units



was conceived as those issues that involve the interactions between children and peers, children and adults, and adults and adults. The units used were those on "play, management, problem-solving, etc. The focus on "culture was represented by the units on self-concept, parents, etc. The focus on "cognition", that is, the character of children's thinking and the conditions that support it, was illustrated by the material on sense perception, toys and games, children's thinking, etc. It should be noted that these clusters were our own choices and there were some differences in the choices and insights made by participants in the workshop.

The purpose of exploring some of these ways of categorizing the content of the FLS units and expressing their interrelatedness, is not to impart any absolute statement. Rather, it is to help the user gain a sense of the intentions and content embedded within the system as a whole,to see other topics to which the FLS can be addressed, to be aware of other concerns not explicitly stated in unit titles, and to see how units in combination can be used to address a variety of in-service and pre-service needs in early childhood education.

## WHO IS THE FLS FOR?

This section discusses the people who may be interested in using the FLS as a resource. Professional roles and functions, opportunities, and interests are discussed.

The Flexible Learning System provides training for personnel in early childhood education in both in-service, and pre-service settings. The FLS was originally envisioned as a complex enterprise in which the first stage of development would produce materials for teaching assistants, and that in later stages of the project we would transform the same topics and contents for appropriate use by other staff members, including teachers, teacher trainers and supervisors, administrative staff, support services, social service people and the like.

In the course of developing and field testing the material and relating our activities to the needs of the field, it became readily apparent, particularly in the case of in-service education, that the materials needed to simultaneously address the needs of the entire teaching team rather than focusing only on teaching assistants. For one, it was unreasonable to expect teaching assistants to develop insights in areas unfamiliar to the teacher and still have these insights brought to bear in the classroom practices. Secondly, a number of people expressed the view that many of the FLS topics concerned issues not adequately addressed in the preparation of a good portion of teachers in early childhood education and that we should be concerned with educating them as well. We also found that a distinction between teacher and teaching assistants and para-professional staff may assume a good portion of the responsibilities for operating the classroom and may operate as teachers.

As a result, the FLS material came to address all of the practitioners in the classroom as well as those providing training to classroom personnel.

Aside from the job roles to which the FLS material relates, it's worth noting that the material is probably most useful to those interested in an active learning process for trainees as opposed to a dominant use of lecture. It is also for trainers and trainees who have access to classroom situations and opportunities to work with children. Further, it is useful for those interested in exploring approaches to competency based training. The Child Development Associates program in a number of community colleges have had success in using FLS units as part of their training for CDA candidates.

Contemporary teacher education includes a wide range of content and circumstances running all the way from summer institutes, weekend workshops, evening workshops for inservice training, community college courses, university courses, materials distributed by state departments of education and the like. The FLS materials have been used in all of these contexts and in a variety of ways. In addition, a number of people have made use of the material outside the normal concerns in early childhood education. There have been applications to the education of foster parents and for parent education in general. There have been applications to special problems such as the reflection of culture in classroom materials, and to other topics that may be of interest to people not necessarily working in early childhood education.

Some have been an application to problems of mainstreaming handicapped children into normal classrooms. Units such as "Self-Concept", "Toys and Games", and "Children's Thinking" have implications for the issues of mainstreaming. Much of the FLS material has an application, at both undergraduate and graduate level, for students and instructors who again, are not directly

concerned with early childhood education or possibly even education per se. For example, the material on children's thinking provides a strong foundation for understanding child development, in particular, Piaget's theories. The material on self-concept may prove relevant to students interested in the character of self-esteem and its relationship to environmental influences. The unit on "Black Perspectives" provides a rich insight into Black experiences in this country and the manner in which the culture has reflected those experiences.

Again, much of the material has a relevancy to primary school and in some cases even secondary schools. The units on "Classroom Arrangement", "Children's Thinking", "Self-Concept", analyzing literature in terms of Black and Chicano perspectives and the general question of literature, all have an application going beyond the early childhood years. The material on Communicating and Working with Parents has a great deal to share regarding the process of communication and is not restricted to a concern with parents.

In sum, it is impossible to specify all of the audiences which could benefit by an association with the FLS materials. They are for those preparing to work or presently working in classrooms with children, particularly in early childhood education; those who have the responsibility to train other adults in the area of education; and those simply interested in the variety of the topics contained in the FLS. Perhaps the best answer to "Who is the FLS For?" is to be found in the hands of experienced trainers who can create the "match" between FLS and their own particular group of learners.

## HOW DO YOU USE THE FLS?

This section treats the more superficial issues of FLS use. These include the social conditions in which the material is explored as well as the character of the learning activity.

A full discussion of how the Flexible Learning System can be used would involve a variety of issues, topics and concerns. In this section, I want to address the question in more elementary terms.

One dimension of FLS use concerns the social relationships involved in the learning context. It's quite possible for an individual to read through the material on their own and get a fair amount of information from the modules. Most are not really written for reading with the exception of certain sections within the units, and therefore are not easily read. More importantly, many of the insights to be gained from the FLS material involve experiences with others. A more ideal situation would be one in which learners worked together as a group, going through the units, carrying out the activities, and discussing the material. A more ideal setting yet, would consist in a group of learners under the direction of a competent trainer, familiar with the material and the system through previous use both as a learner and instructor.

A second dimension of FLS use involves the character of learner activities, that is, doing the activities involved in the units (with or without modifications) versus simply reading the material with others or on one's own. Many of the activities involve such things as reflecting upon something and writing down three of your thoughts. Usually, when people read that type of instruction on their own they generally don't do it. However, this type of activity contributes to the richness of the material and we have found that it is important for

people to be involved in activities even as simple as that just described. There are a range of other activities with characteristics such as classroom observation, thought problems, carrying out tasks with children, role playing with adults, and so on. These activities are really the core of the training program; the written material simply amplifies the insights that grow out of such activities. In addition, many of these activities involve working with others and having the benefit of shared insights. Thus an optimal use of the FLS would involve the trainer, a group of learners and a focus on the activities embeded within the units.

There is a fair amount of variation among the units in terms of the social variable and the activity variable. Some of the units such as "Classroom Arrangement" have been written so that students proceeding on their own could easily and productively carry out the activities of the unit and get most of the information. Some of the units such as Teaching Children to Integrate Language Experiences are much more process-oriented and more dependent upon activities involving a dynamic interaction among fellow learners.

A third dimension that can be used to describe the uses of the FLS, one also involved in the above, concerns whether or not the material is used as written. It has become clear that in a good many cases the material is not likely to be used in the step-by-step fashion in which it was designed. A good trainer, particularly one informed by a number of previous experiences and opportunities to use the material, may begin to know which readings their own students should bother with and which ones may be irrelevant, too difficult or not worth the effort. A good trainer should consider different sequences for the activities, replacing activities, eliminating activities and adding activities. Following from these changes, it's also clear that the material may not be used within the time-frame suggested. Most of the units were written to constitute a fairly lengthy course such as eight weeks with a class meeting

maybe once a week for eight or ten weeks. In many cases, this will not fit the conditions available to the trainer or fit his/her desires. In some cases this has been resolved by using sections or entire units as material for independent study purposes. At any rate, another way in which the material could be modified is to think about how extensively you want to be involved.

Lastly, the fourth dimension for describing possible uses of the FLS involves the material itself. While the FLS materials were written in the form of learner guides with the anticipation that they would be used directly by learners, there is absolutely nothing that requires this. Many FLS trainers have presented some sections verbally, Xeroxed certain parts for students and, in a sense, constructed a course using the FLS as a resource for the construction. This has seemed to us as a very useful approach in that it involves trainers in an active and constructive process which enriches their own understanding of the material and provides a further source of motivation.

As to additional support materials, it's possible to supplement the units with material taken from outside the system. As an example, the videotapes which supplement the material on child development may be replaced or extended by other materials which illustrate children's thinking. For the unit on observing children's play, a substitute film could be used or it may be modified by having learners go into classrooms to observe children and discuss their observations. There are a variety of ways an imaginative trainer can alter and supplement the materials with outside resources.

## ELEMENTS OF TRAINING

This is an important section providing a brief description of 25 elements that go together to provide the training experience which is the basis of the FLS instruction design.

In this section we will explore some of the elements involved in Flexible Learning System training. These elements, which are not titles of units, are nonetheless part of the content of the FLS program; they are the vehicles by which the sharing occurs. One can find evidence for these elements in the FLS training workshops and in the analysis of the content of the units themselves. (See sections on "Sharing" and "FLS Contents").

The elements, by and large, apply to social sharing or training in groups. They do not so much concern the individual working by his or herself although many of the same issues can be translated to individual activity. Also, many of these elements reflect experiences in workshops of rather lengthy and intense duration, often for five days, eight hours a day, with a staff of approximately five and maybe 30 to 40 participants. This format has its advantages as a method of sharing, but it is agreed that it may be difficult to duplicate and may not always be appropriate to the instructional conditions or to the learning task at hand. However, most of these elements have a relevancy to different types of sharing formats such as a college course, four-hour workshops, or any variety of settings. This relationship to different settings would of course require some translation of these elements.

A brief review of this list of elements indicates a variety of relationships between the FLS units and these elements. In some cases the elements themselves are the major concern of the unit. In others, these elements are part of the unit activities and serve to develop the the process embedded in these units.

In the following short discussion of each of these elements, the sequential presentation is not meant to imply any particular ordering of relationships. That is, it is not assumed that training starts with "introductions" and that "developing a collective consciousness" is to be followed by "warm-up activities", etc. All of these elements are interdependent in mutual ways and many of them can be brought to bear simultaneously. For example, one might consider a group introducing activity that involves personal experiences and provides the function of a warm-up activity.

GROUP INTRODUCTIONS

It's important in working with any group of people to provide an opportunity for members to become familiar with each other in a comfortable way, learning something about each other. There are many possible formats. One example involves pairing people to exchange information, often with a specific focus that might provide a warm-up for activities or issues to follow. That sharing may involve personal experiences, the reason for being in the workshop, professional background, personal likes and dislikes, something they could bring from home to reflect their interest in the particular training situation and so forth. We've had these pairs report to the total group with each individual reporting on what their partner shared, thereby taking the responsibility to actively

listen and reflect back in their own terms. This provides the other partner an opportunity to hear what he/she has communicated and to correct any distortions. This example simply illustrates some of the concerns, considerations and mechanisms for introducing people. It is not a model to be copied.

## ESTABLISHING COLLECTIVE CONSCIOUSNESS

If a group is to become a group and provide some of the benefits that can derive from group activity, then it's important to make an effort to create conditions in which the group as a whole begins to develop some identity, some collective consciousness. By and large, this can not be achieved within a single activity. It's something that needs to be considered throughout the evolution of the group. The extent to which a productive collectiveness can be formed is a function of the extent to which participants are allowed to actively participate, to take responsibility and ownership for their activities, and to be involved in respectful and mutual ways, with opportunities for agreeing and disagreeing, and expressing needs and concerns.

## WARM-UP ACTIVITIES

Prior to an activity it's helpful if people have an opportunity to warm-up to it, to bring themselves into a state of mind in keeping with what will be expected. Personal experience is an important element in warming-up to something. For example, the children's play unit begins with a reflection by participants upon one of their earliest play experiences, followed by some form of sharing and discussion. This sets a tone for the issues to follow and gives people a sense of the ways they will be working with each other, a sense of mutual respect for common personal needs and experiences.

## STRUCTURING OF GROUPS

The use of groups in learning activities requires a flexible conception of the group make-up. It is not necessary that people be working within the same group throughout the training activity. We have often broken large groups into small groups. We've had people move from one small group to another; having some groups last for a very short period of time with others lasting longer. We've dissolved small groups into total group activities. A number of factors should be kept in mind. For people who are new to each other, the first group they form, the first opportunity to share and introduce each other, somehow makes the group special. If it is disbanded too early or treated in a cavalier fashion, as just a convenience for the trainer, one immediately does a disservice to the sensitivity of the participants. Often people need to be given some forewarning of the types of the groups they may be involved in so they can think about who they might be working with and again this is more often the case with people who are new to each other. People are often hesitant to open up to a group unless they've worked with or already know its members. In many cases, the trainer or instructor may feel that it's desirable to separate people already familiar with each other and to expose new people to each other. This should involve the use of random assignment procedures so that it's clear that the grouping is not based on pre-selected criteria or hidden agenda.

## EXPLORING PERSONAL EXPERIENCES

The value of using personal experiences has already been mentioned. It is such an important issue that it stands as a separate element in training. Essentially, it refers to the need to constantly provide

opportunities for people to use examples from their own lives and activities which they have selected as being important and relevant to the issues at hand. This effort to personalize the training activity and to relate it to their own life is one of the surest ways to develop the sense of ownership which is critical for the generalization of training.

## ACTIVITY PACING

Any activity has a pace which is the rate at which the activity moves. It might be thought of in terms of the amount of time that a particular focus is maintained and the number of focuses within a period of time. The issue of pacing cannot be quantitatively specified as to what is most desirable. The point is to recognize that a pace is always an element and it may be too slow or too fast for a variety of people within the groups. It's important to watch for indicators that things are dragging, or that they are moving too fast for people to assimilate the materials either affectively or cognitively. There should be time to express concerns and pursue topics that strike participants as terribly important. Often it needs to be recognized that members of the group have different needs in terms of pace with respect to a particular topic, issue or concern. Opportunities often need to be provided for individuals to step out of the group and work at a slower or faster pace either alone or with others who have similar needs.

## CHANGING PERSPECTIVES

The concept of the need for changing perspectives, as a basic issue with the Responsive Education Program, is an outgrowth of the theoretical model

of O. K. Moore (Moore, 1969 and Alward, 1973). O. K. Moore's terms of this concept included being either active or passive, receptive or critical and evaluative or reflective upon one's own activities. It may be possible to categorize all perspectives into these three categories, but any particular focus on an activity is a perspective, and the idea of changing perspectives is simply recognizing that learners need an opportunity to bring different types of focuses to an issue. For example, being a member of a large group or small group, lecturing or dialoguing, describing or demonstrating, constructing or overseeing something, taking notes on one's own or taking notes for others, are all different focuses or perspectives.

TRANSITIONS

Between activities and between focuses within activities there is a transition point, a moving from one aspect to another. Each of these transitions has to be considered in terms of its social, emotional, cognitive, and even physiological characteristics. The transitions need to be thought of in terms of pacing, closure, incompleteness (closing in on an issue too soon, or leaving an issue before closure has been achieved). One must consider the pros and cons of leaving an issue while there are emotions that need to be resolved. People often become terribly excited in a workshop and need to move from the excitement in a gradual, rather than abrupt way. Further, a transition from an exciting to a very dull activity may lose the energy and momentum of the group and lead to less involvement and motivation.

BRAINSTORMING

Brainstorming is a method of getting people to generate a great deal of pre-conscious or "below the surface" insights. I think the benefit of

brainstorming needs to be understood in terms of the tendency of the pre-conscious and subconscious mind to provide a great deal of richness that is not easily brought to conscious forms. Brainstorming is a way of having people generate material rapidly (often as a group) in order to get at some of the more hidden associations with the material under consideration. A method of getting people to brainstorm might be to give a very clear and limited focus for reflecting about some personal experience. This is followed by a rapid group generation of this reflection to be recorded by a group recorder. Often, it may be difficult, particularly if the material is affectively loaded, for people to brainstorm in a large group. They may need the safety of smaller groups. Such groups with more intimacy and more familiarity among the members may be used for a brainstorming activity prior to sharing the results with a larger total group.

CRITICAL ANALYSIS

Often, the opposite of brainstorming is more appropriate and might involve a rather deliberate and thorough critical exploration of the material. This is in contrast to the kind of playful and preconscious generation associated with brainstorming.

FOCUSING

Focusing is an important ingredient in all sharing and learning activity. It's concerned with the clarity of the task and purpose given to individuals as well as the boundaries, limits or size of the task at hand. If you offer very broad questions like "what makes good education?" you have provided a clear focus, but you've also provided a very broad focus in the sense that there is a great deal that can be said. If you're not interested in hearing everything everyone has to say, but you do want to

the basic ideas, then something like brainstorming may be used first followed by some later reflection on the contents generated. We've found that it's very helpful to give people limited or clear focuses so they know that they're dealing with. This should be done in a way that recognizes the breadth of the focus and provides a setting in which the activity corresponds to the breadth of the topic.

FOREGROUND/BACKGROUND FOCUSING

Another way in which focusing can be talked about is whether it's directed to what is immediately at hand (the foreground considerations) or whether focusing is directed to background issues. There often is a great deal of rich material contained in the interrelationships and connections between what has been left in the background and what has been brought to the foreground. By moving participants and focuses back and forth between these two levels, it is possible to mine that rich material.

REPRESENTATION AND CONSTRUCTION

We have repeatedly sopken to the importance of representation and construction. It constitutes the underlying status of intellectual development and social sharing. By representation we mean all those things involved with the construction of a thing to "stand for" something else: a sentence, a workshop, an example, an imitation, a book or a painting, are all ways of representing something. Because the representation vehicles are often external to the person constructing them, they also constitute a basis for sharing and reflecting.

REFLECTION UPON REPRESENTATION

Not only does representation provide the vehicle for sharing between people, but the act of constructing a representation is itself an act

of clarifying what one knows, what the elements are in any given set of concepts, and what the relationships are between those elements. Thus, to either collectively or individually reflect upon and look at one's representation and to analyze them is a method of advancing one's understanding. One way of seeing this phenomenon is to regard previous forms or representation as providing a stage for a following analysis and reconstruction of a new representation. This new representation then constitutes a new understanding which can start the cycle once again. This construction-analysis-reconstruction process is critical to our individual growth and critical to the growth of insight generated in social and collective settings.

RECORDKEEPING

An important facet of training involves providing mechanisms for keeping track of what is going on. In a sense this is a matter of providing evidence of the representations that have been constructed so that they can be reflected upon and searched for whatever new insights they may provide. Mechanisms for recordkeeping cover a wide gamut. A common one we have used involves providing large pads of paper (often on an easel or stand), marking pens of different colors, and somebody with the job of being a scribe, to capture the essence of material being generated by the group. This does not mean that everything said in the group needs to be written down, but activities are often provided to generate ideas in the group and this is a means to get them recorded. We've used tape recorders, audio as well as visual (videotape). On the whole these media are helpful for limited purposes under certain conditions, e.g., the tape of a two hour conversation is often too long to be reviewed and reflected upon in the course of training. One thing

that separates the tape recorder from other forms of recording, note-taking and the like, is that its original use bypasses the important aspect of the learner needing to construct representations. Further, if tape recordings are not later constructively listened to or viewed, they are unlikely to yield much insight.

ACTIVE LISTENING

Active listening is simply the importance of attending to what people are saying. Everybody knows that listening is hard although this common fact may not be appreciated for its importance. Actively listening to somebody often requires stopping them and saying you don't understand, or asking them to clarify, or sharing with them what you do understand of what they've said. Although one can be a very attentive listener and follow very well and never feel a need to check back, the simple act of sharing what you understand often shows surprising differences in meaning and is informative to the person who is talking. Listening attentively requires care in that one has to strike a balance between unnecessary interruptions and getting the meaning. In a group of people, the group facilitator plays an important role in helping to clarify and articulate some of the emerging concerns. A leader needs to do more than take responsibility for his/her own listening. He/she may need to say, e.g., "From what Sally is saying it seems to me she has a different understanding from what you're saying." Again, the leader may often need to impose rules to ensure listening on the part of the group, e.g., "one cannot make a critical rebuttal without first taking the time to express what they've understood." (See FLS unit on Communicating and Working with Parents).

PROBLEM SOLVING

The focus of the unit on problem solving provides some direction on this element. Part of its concern is with the issue of ownership, that is, whose problem is it? That is, who has the responsibility or who can take the responsibility, or who wants to take the responsibility for solving the problem. This aspect of problem solving is an important aspect of group learning. Often, a problem may be raised by one person and nobody else is particularly interested. Often people will expect others, including the teaching or training staff, to solve their problems. Often the individual's responsibility for solutions will have to be clarified. Another aspect of problem solving involves the importance of providing opportunity for the participants to generate problems and questions which strike them as relevant and worthy of being solved, as well as to develop the mechanisms or means for pursuing the problems, of seeking a solution, and opportunities to evaluate the results of their activity in ways which are satisfying to them.

PLAY

Play is a terribly important part of learning. It is often said that the child learns by playing, but it should be understood that this is true for adults as well. One way of speaking to the relationship between play and learning is to make reference to Piaget's conception of play in which the construction of representational vehicles is freed from the constraints of reality. For example, the using of a block of wood to represent a toy car or using a stick to represent a horse, are constructive representational activities which do not inolve actual cars or horses. The opportunity to play, in particular ways that have represen-

tational properties, is a good way of allowing people the freedom to construct representations that reflect some of the more preconscious aspects of the material being represented. Another aspect of play is its relationship to risks and failures. One of the things that characterizes play is that it's pursued without the consequences of failure. For example, one could play you're "flying an airplane and you crash" without the ill effects that might be associated with this in reality. Likewise, in make believe and pretend one cannot be held strictly accountable for the validity of the material being created. Lastly, in the emotionally and cognitively free climate of play, it is possible to see relationships which would not be possible under conditions of critical analysis and focus.

EMOTIONAL SUPPORT

Throughout these elements and much of the FLS material, there's a concern with affective and emotional support in learning situations. It's important to recognize that representing and sharing with others may involve risk, embarassment, fear of failure, looking poor and stupid, not doing as well as the next person or the last person and so forth. These aspects of social interaction are not be be avoided or to be deprecated as not adult-like. One needs to be aware or to at least be concerned with the emotional risks one might be imposing upon learners. They are to be understood as inevitable elements which must be sensitively handled. It is important to provide a climate in which participants feel comfortable in asking for as well as refusing help and asking for clarification from others, including the instructor, when they're not clear.

## SUPPORT FOR CRITICISM AND PRAISE

It's important to provide a climate in which participants can be critical of the learning conditions, of ideas presented by others, their own activity, or critical of the teacher. It's equally important and even harder to achieve, to help people take personal credit for those things they feel good about that they or others have done. One can provide this kind of support by modeling it, by being the first person to say, "I don't really agree with your idea," or "I just did something that I feel very good about," "Something you just said gave me what I've been looking for" and so forth. This certainly does not include "phony" activities of criticism for criticism's sake and praise that's insincere or not deserved. We're talking about the importance of creating an opportunity and a setting in which people can have an exchange of agreements and disagreements, as well as a setting in which people become comfortable with accepting some of the richness of their own activity and insights as well as those of others.

## ASSESSING LEARNER PROGRESS

Throughout any span of teaching activity the instructor needs to be concerned with the progress made by students, not only in the instructor's eyes, but in the learner's eyes as well. This need not be a formal assessment. It may well be simply asking people, "How are you doing?" "Are you getting what you wanted?" "Would you like to switch focuses on this?" "What do you feel you're understanding and not understanding?" This can be done by having people keep journals, keep records, write answers to particular questions and problems, describe what they like or didn't like about a particular session, state what they felt was clear and unclear, etc. If one would like a sense of what's happening in a training situation as a whole, records can be collected anonymously

## SUPPORTING NEEDS FOR AUTONOMY

Another important element in working with people is to recognize the need for people to "do it themselves," to do it on their own with some autonomy from the dictates of the instructor and others. Quite often, the instructor wants to dominate the stage and specify answers as well as the questions. In many cases, activities are provided for people to generate their answers and the instructor already has the answers in his/her pocket. This style of teaching separates the learner from responsibility for their own learning and from the immense satisfaction and rewards that can be achieved at having invented something that is a step forward for one's self.

## EMOTIONAL AND COGNITIVE INTEGRATION

Integration is an important psychological and social concept and one certainly not easily conveyed. A portion of the topic is addressed in the FLS unit titled Teaching Children to Integrate Language Experiences. One aspect of integration involves being able to sort out what an experience means for one's self. This involves being introspective about emotional or affective reactions to particular activities, events, knowledge, and so forth. Part of this involves all the elements we've talked about, e.g., focusing, pacing, autonomy, and play, and part of this involves the simple importance of providing people with an opportunity to reflect privately, to produce a representation, or to express what they feel.

## PHYSICAL FACILITIES

A seemingly routine issue turns out to have an immense amount of signi-

ficance to learning, particularly in a socially interactive training setting which includes dynamic activities, changing of groups, autonomous use of resources, etc. This issue concerns the spatial arrangement of materials and the physical environment of walls, tables and so forth. These issues have strong effects on the operations of people. We have found in our workshops that a large portion of learning activities and the day-by-day revisions of planned activities involved consideration of the physical environment. What types of behavior is supported in it? What are the conflicts and confrontations? The task is to work out a spatial statement that is compatible with the process statement of the training (See FLS unit on Classroom Arrangement).

PHYSIOLOGICAL AND CONVENTIONAL SENSITIVITY

An important aspect of working with people involves a sensitivity to physiological needs such as warmth, food, opportunity for rest, opportunity for quiet and getting away from it all, having water and tissue handy and the availability of coffee or juice in the morning, etc. In our workshops we've made an effort to provide a variety of good eating experiences. Surprisingly, we've achieved a number of our goals through the selection of food and the physical comfort that's been provided, e.g., demonstrating our sensitivity to peoples' individual tastes, illustrating multicultural themes, providing humor -- McDonald burgers on National Food Day -- and providing a pleasant social environment. There are also conventional sensitivities that need to be kept in mind such as the ways in which people conventionally relate, the ways in which people express personal needs, the ways in which people meet together before classes begin and so on.

# PART II

## FROM PRACTICE TO PRODUCT AND BACK

## THE FLS CONCEPT AND ITS DEVELOPMENT

The following section presents the original conception of the Flexible Learning System (FLS), and how both the concept and its realization grew out of the Responsive Education Program. While formally distinct from this program, the FLS content and instructional design were articulated during development and implementation of the Responsive Education Follow Through, Head Start and parent education programs. This section is particularly informative about the origins of FLS content and competency unit topics.

The Flexible Learning System (FLS) project was proposed in 1972 in response to a growing trend toward programs for competency-based teacher education (CBTE), (Nimnicht, 1973). There are divergent views about what is meant by "teaching competency." However, it is generally assumed that teaching is a competency and may encompass clusters of other competencies, and that the focus of teacher training should be the development of these competencies.

The prospect of CBTE made it possible to consider a more individualized way of working with students. Students lacking or desiring certain competencies could independently pursue this achievement without having to adjust their education to a specific and standard sequence of instruction. This idea is currently being pursued, clarified and articulated in a variety of community colleges and other teacher training institutions throughout the country. The Child Development Associate program is an example of such a program.

There is no clear taxonomy for the competencies teachers initially should have. The specification of competencies is a matter of program emphasis. The FLS was conceived as an outgrowth of the Responsive Education Program (Nimnicht and Arrango, 1973). The original FLS proposal specified approximately 40 competencies that we felt were important to implement

Responsive Education in the Classroom (see Table 1). This judgment was based on six years of developing and implementing the Responsive Education model.

The FLS was initially conceived as primarily for in-service training. During the first three years of the project the plan was to focus on 20 of the 40 proposed competencies and develop them for the teacher assistant level. At the same time, it was anticipated that the content of many of these "competency units" would be appropriate for teachers, teacher supervisors and trainees, program directors, parent coordinators and the like. Since each of these roles have different jobs and functions, it was anticipated that training materials directed to each would be different. For example, teacher trainers might want to transmit its content to teachers through training, whereas the teacher assistant or teacher might not. Further, program directors may need to be aware of the concepts and support requirements, but not necessarily competent in the content.

We were also concerned with assessing competency in ways appropriate to each of these populations, such that those who could demonstrate competencies with or without the training could receive whatever credit or promotional benefits were related to the training. It was even hoped that the assessment of competencies would eventually reveal which sub-competencies a person needed in order to achieve a higher order competency. We hoped to be able to specify which "clusters" of competencies resulted in which student gains, with skills produced by one competency unit, augmented and made more likely by participation in other units (see Tanaka, 1976).

Examining the development of the FLS can tell us more about what it is as well as how it can be used. Because of its origins in the Responsive Education program, it might serve to briefly explore the unique issues raised

Table 1

RELATION OF COMPETENCY UNITS, ROLES AND REQUIRED LEVELS OF COMPETENCY FOR ADULTS FILLING DIFFERENT ROLES WORKING WITH CHILDREN

| Competency Unit | Level of Competency for Each Role | | | | | |
|---|---|---|---|---|---|---|
| | Teacher Assistant | Teacher | Program Advisor | Program Director | Parent Coordinator | Social Services Worker |
| 1. Understand total program* | 1 | 1 | 1 | 1 | 1 | 1 |
| 2. Model language for children | 2 | 3 | 4 | 2 | - | - |
| 3. Develop child's language skills* | 2 | 3 | 4 | 1 | - | - |
| 4. Develop child's relational concepts** | 2 | 3 | 4 | 1 | - | - |
| 5. Develop child's category concepts** | 2 | 3 | 4 | 1 | - | - |
| 6. Develop child's social concepts** | 2 | 3 | 4 | 1 | - | - |

The numbers in the body of the table represent the following levels of competence:

1. Verbal recall: The knowledge of something as expressed in verbal or written form, or the ability to identify a behavior when seen in a classroom or on videotape recording.

2. Produce behavior: The ability of the adult to produce the desired behavior.

3. Generalize behavior: The ability to recognize that the adult has himself produced the desired behavior, or the ability to generalize from one behavior to another.

4. Teach behavior: The ability to recognize that the adult himself has produced the desired behavior, can generalize from it, and can teach the behavior to someone else.

* An asterisk beside a competency unit indicates that the competency unit will contain different content for adults working with the three different age groups (ages 6-9, 3-5, and 0-2) but the procedure will remain the same.

** A double asterisk indicates there will be considerable change in the competency unit for the three different age groups.

No asterisk indicates that there will be no change from one age group to another in the competency unit.

| Competency Unit | Level of Competency for Each Role: Teacher Assistant | Teacher | Program Advisor | Program Director | Parent Coordinator | Social Services Worker |
|---|---|---|---|---|---|---|
| 7. Develop child's problem-solving ability* | 2 | 3 | 4 | 1 | - | - |
| 8. Use games and other materials* | 2 | 3 | 4 | 1 | - | - |
| 9. Test young children* | 2 | 3 | 4 | 1 | - | - |
| 10. Use the child's play for learning* | 2 | 3 | 4 | 1 | - | - |
| 11. Understand child's language | 2 | 2 | 4 | 2 | 2 | 2 |
| 12. Understand child's background | 1 | 1 | 1 | 1 | 1 | 1 |
| 13. Help child develop healthy self-concept | 2 | 2 | 4 | 2 | 1 | 1 |
| 14. Control children's behavior in a group | 2 | 3 | 4 | 1 | - | - |
| 15. Help child develop self-control | 2 | 3 | 4 | 1 | - | - |
| 16. Work effectively with other adults | 2 | 3 | 4 | 4 | - | - |
| 17. Work effectively with parents | 2 | 3 | 4 | 4 | 2 | 3 |
| 18. Conduct Parent/Child Toy Library * | 2 | 1 | 4 | 1 | 2 | 1 |
| 19. Use Learning Booth | 2 | 1 | 4 | 1 | - | - |
| 20. Undefined | | | | | | |
| 21. Organize classroom and materials* | - | 2 | 4 | 1 | - | - |
| 22. Plan for day, week, and year* | - | 2 | 4 | 1 | - | - |
| 23. Evaluate progress of children* | - | 2 | 4 | 1 | - | - |
| 24. Evaluate textbooks for cultural relevance** | - | 2 | 4 | 2 | - | - |
| 25. Explain program to parents* | - | 2 | 4 | 2 | - | - |
| 26. Understand demeaning behavior with racial overtones and eliminate | - | 2 | 4 | 2 | - | - |

| Competency Unit | Level of Competency for Each Role | | | | | |
|---|---|---|---|---|---|---|
| | Teacher Assistant | Teacher | Program Advisor | Program Director | Parent Coordinator | Social Servies Worker |
| 27. Undefined | | | | | | |
| 28. Undefined | | | | | | |
| 29. Make classroom observations | - | - | 2 | 1 | - | - |
| 30. Critique video-tapes of classroom | - | - | 2 | 1 | - | - |
| 31. Determine level of competency | - | - | 2 | 1 | - | - |
| 32. Make demonstrations* | - | - | 2 | 1 | - | - |
| 33. Conduct workshops* | - | - | 2 | 1 | - | - |
| 34. Involve parents* | - | - | 2 | 1 | - | - |
| 35. Undefined | | | | | | |
| 36. Undefined | | | | | | |
| 37. Set goals* | - | - | - | 2 | - | - |
| 38. Analyze problems* | - | - | - | 2 | - | - |
| 39. Derive objectives* | - | - | - | 2 | - | - |
| 40. Design instructional program* | - | - | - | 2 | - | - |
| 41. Plan program implementation* | - | - | - | 2 | - | - |
| 42. Plan program evaluation* | - | - | - | 2 | - | - |
| 43. Undefined | | | | | | |
| 44. Undefined | | | | | | |

Note: The undefined competencies (20, 27, 28, 35, 36, 43, 44) are listed in this table as an indication that a number of additional competencies will be defined as work progresses. Eventually, additional competencies will also be defined for Parent Coordinators and Social Services Workers.

by this experience. However, it should be noted that the FLS is formally distinct from the Responsive Education program.

During the first two years of the FLS project, its staff and the Responsive Educaton staff were one in the same. Staff members simply coded their time to whichever project they happened to be working on, e.g., The Responsive Follow Through, Head Start, Parent/Child, and FLS programs, etc. This close relationship tended to fashion the FLS as a potential tool for Responsive Education implementation and dissemination. However, this was a purpose for which it was not designed and to which it was only minimally applied. Midway in the four year history of FLS, the two projects were formally separated, taking on independent staff and purposes (see Table 2). With this transition came a FLS emphasis on creating responsive staff trainers and developers in the field of early childhood education. While the FLS content continues to address many competencies felt important to creating a responsive classroom, the problem of implementing the Responsive Education program was no longer within the purview of the FLS project.

The Responsive Education program originated with Dr. Glen Nimnicht and the Nursery School which he founded in Greely, Colorado during the mid 1960's. The New Nursery School was concerned with developing children's healthy self concepts and with helping children make choices and to become better problem-solvers. The Responsive classroom was organized around types of learning centers, and incorporated a number of self-guiding toys and games with built-in feedback (Nimnicht and McAfee, 1969).

During the same period, the federal government made compensatory education one of its priorities. The concept of compensatory education expressed the view that the educational failure of large segments of the population was a result of inadequate experiences in their homes and social life, making it impossible for them to keep pace with more advantaged children. In the reality

Table 2

Who Developed the FLS?

| FLS UNIT | DEVELOPER | PROJECT RELATIONSHIP | | | | |
|---|---|---|---|---|---|---|
| | | REMP - FLS | | | FLS Only | Consultant Developer |
| | | H.S. | P/C | F.T. | | |
| Classroom arrangement<br>Children's thinking<br>Concepts<br>Growing mind | ·Keith Alward<br>·Geoffrey Saxe | | | X | | X |
| Play<br>Management | ·Judy Brown | | | | X | |
| Language | ·Margot Biestman | | | X | | |
| Toys & games | ·Edna Brown<br>·Stan Johnson<br>·Fred Rosenau<br>·Don Adcock<br>·Vickie Houdyshell<br>·Glen Nimnicht | | X<br>X<br>X<br>X<br>X<br>X | | | |
| Chicano perspectives | ·Oscar Uribe<br>·Joseph Martinez | X | | X | | |
| Parents | ·Angelo Garcia<br>·Margaret Robinson<br>·Dennis Sims | X | | | | X<br>X |
| Sense perception | ·Beth Gilbert<br>·William Finzer | | | | | X<br>X |
| Literature | ·JoElly Taylor | | | X | | |
| Self concept | ·Natividad DeAnda | | | X | | |
| Introduction | ·Judith Hubner<br>·Marlene Cresci | | | | X | X |
| Problem solving | ·Joanne Yinger | | | X | | |
| Black perspectives | ·Francione Lewis | | | X | | |

H.S. = Head Start
P/C = Parent Child Toy Lending Library
F.T. = Follow Through

of today's socio-economic structures, compensatory education had its largest clientele in the minority groups of this country, although the criterion for who would receive extra treatment was based upon the economic structure of the family and of the community.

One of the early manifestations of compensatory education was the national Head Start program which began with the assumption that a few months of enriched preschool experience would produce a population of educationally competitive children. An early appreciation for the naivete of this experiment resulted in the creation of a more sustained Head Start experience.

During this transformation of the Head Start experiment into extensive preschool education, Dr. Nimnicht was given the opportunity to implement his own version of an ideal preschool Head Start environment. Shortly afterwards, in 1969, he joined a new national effort to provide an enriched form of educational experience for "disadvantaged" children from kindergarten through third grade. This experiment was entitled the Follow-Through program.

With the implementation of Follow-Through, the federal government constructed a broad design called "Planned Variation" in which a range of programs or "sponsors" could implement their conceptualization of early childhood education in Head Start and Follow Through settings. The Responsive Education Program was selected as one of these "sponsors", and was implemented in 14 districts throughout the United States. These Follow-Through sites continue today as viable and healthy programs (Responsive Education Program, 1976).

The implementation of the Responsive Follow Through program involved establishing close working relations with educational communities and their parents. Local staff was trained to work with and train teachers and teacher aides. This effort involved a complex program of in-service training for geographically diverse populations with a range of educational values,

capabilities and dispositions, preferences for style of work and tolerances and intolerances towards the population addressed by the Follow-Through program.

The aim of the Responsive program at this time was to help children develop their intellectual, social and linguistic skills, their ability to solve problems, and to help children develop a healthy self-concept and an appreciation for their culture. The proposed method for reaching these goals was the Responsive Education Environment, created to support and encourage more freedom on the part of children and more self-direction and autonomy in a broader segment of classroom activities than was traditionally encouraged (O.K. Moore and Anderson, 1969). There was, on the whole, an effort to create culturally relevant experiences and conditions that would respond to the directions initiated by the child rather than those to which the child was expected to respond.

It was naive to assume that these ideas could be easily comprehended or easily implemented in the classroom. It was somewhat unreasonable to expect teachers to adopt a particular way of working with children if they did not feel comfortable with that way of behaving or could not achieve what they felt obligated to achieve, or felt that it brought about more problems than it solved. Similarly, there were teachers who were capable of imitating what was being asked and yet in the judgment of program developers and trainers they could not create the classroom conditions we had hoped for. There were also teachers and aides in many of the programs, however, who were very close to or an improvement upon the ideas which the Laboratory staff attempted to impart. Throughout this, there was the evolution of the staff's own understanding of education, working with children, and implementing a program of training with adults. This evolution was a constant source of new ways to work with people, new topics to be explored, of new ways to train in areas

we already felt fairly clear about.

One example of this evolution is seen in our understanding of how classroom practices affect childrens' self-concepts. The earliest literature produced by the Responsive program staff focused on practices that would not be demeaning to children and that would help children feel better about themselves. These included putting up pictures of the children in the classroom, not using demeaning language or derogatory terms, using positive comments when re-directing children, and so on. There was a list of things one could do to help children feel better about themselves.

This is not to say that it is a simple matter to work with teachers who behave in ways that are different from one's notions about how they should behave. The question of demeaning behavior certainly was not a problem that could be easily solved by specifying a number of things to do with children such as putting up pictures of them and not saying negative things.

Our eventual notion of self-concept was that, whatever individuals come to know and believe about themselves is part of their self-concept. And the degree to which their knowledge is both accurate and maintains a self-esteem, is the degree to which they are moving towards a healthy self-concept (see "Helping Children Develop Healthy Self-Concepts"). If the program was to help children develop a healthy self-concept, it would have to address how children find out about themselves, what they find out, what there is to insure the validity of this information, and how this can be done in a way in which self-esteem is enhanced. This problem cannot be addressed by a static and specificable list of things to do or not to do.

At the same time that this concept was developing, Nat DeAnda, the principle author of the FLS unit on self-concept, and other staff members were developing skills in working with people to not only model the practices

that should follow from this notion of self-concept, but also to provide a setting in which people could begin to articulate how a variety of events and phenomena in human interactions relate to self-concept. The character of the sharing in this area involved moving slowly and with tolerance for the difficulties people had taking on somewhat different perspectives about their own performance and ways of relating with children and adults. It engendered problems in how to give feedback to teachers and how to improve staff relations, as well as how to work effectively and reciprocally even while holding the opinion that the other person is wrong. It involved a sensitivity to the reality that it is often more destructive to inform people about their errors than to provide an opportunity to clarify the character of their practices and how they relate to their attitudes, beliefs and goals. It meant discussing how demeaning practices could be changed to enhancing ones. At the same time, the issue of self-concept had to be related to the variety of ethnicities and life experiences represented in our classrooms. There was a range of awareness to emerge regarding the experiences in this country by peoples of different racial and cultural backgrounds and how these experiences relate to the expectations and character of educational experience. A good portion of staff activity took on the issue of culture and the relationships of culture to education.

This was the initial thinking on what was later to become the focus of one of the FLS units. The topic of self-concept needed to be studied in terms of how it related to other topics, such as culture and what we were learning about informing educational practice through in-service training. This tracing of relationships is also true of other topics in the FLS. For example, the concern with problem solving began, as in the case of self-concept, with simplified and naive notions about what was entailed. This grew into an ability

to affect practice and to specify what "right" and "wrong" practice would look like. Later, this topic also became connected with self-concept, culture, and a variety of other FLS concerns later expressed in the FLS.

There was equally a concern with the way the classroom operated, its management, its arrangement, the pacing and sequencing of activities, the self-direction of the children and assessment of their needs and progress. And these issues were interrelated with the ones we have already mentioned. The problem of implementing the Responsive program was certainly much more complex than the original suggestion that children be allowed to choose whether to come or not to come to activities; that the activities have a quality of feedback and reinforcement, that they involve some element of problem-solving, and allow for individualizing or for self-pacing. These were all things that had been said regarding how "classroom curricula" should be carried out, but it was terribly difficult to transmit the relation of these ideas to practice.

Implementing the Responsive Education program involved working with people in training and in-service situations; creating instruments for carrying out classroom observations; giving feedback to teachers; helping districts carry out activities; and providing supportive services and workshops. It was in that activity, rather than in the development of materials that the FLS seeds were planted. The FLS was very much a result of on-the-spot practice with a great deal of staff interaction about what to do next, what the problems were, what was happening in a certain district, what the topics of the following workshop should be, who should be invited, how it would be structured and so on. At the risk of oversimplification, it might be said that the origins of the FLS were in the preparation and conducting of Responsive training workshops and the follow-up activities that resulted.

Throughout the task of Responsive Education implementation between 1969 and 1972, the staff had been developing an appreciation that they neither individually nor collectively had all the answers to problems that constantly emerged in the field. The skill they did have was to help people problem-solve for themselves, work out understandings for themselves within a climate provided by keeping an ear open for the richness of people's ideas, their integrity, the connections that might emerge in a discussion or activity and for supporting people to explore and express their view. It was inevitable, then, that when the Follow-Through staff was given the responsibility for developing competency units, they turned their attention to issues faced in the field. The attempt was to provide an FLS experience that represented and recreated the experience people gained through the workshops and other activities characterizing the experience.

The topics introduced in the first FLS proposal reflected what the staff knew to be more important issues in their working with the on-site staff. The topics were in no sense immutable domains derived from a theory or a taxonomy of educational skills. Rather, they were derived from the elements which seemed necessary to keep moving forward in understanding and implementing an idea which itself was in a constant process of elaboration and development. Given this difficult task, it's almost surprising that of the initially proposed 21 FLS units, approximately 15 are developed; not necessarily in the original topic delineations or titles but in terms of the inherent issues. The development of these topics was fueled by a close and constant working relationship with practitioners attempting to translate the Responsive program into action. The result of this activity was a smaller but broader list of mutual staff interests and concerns. Table 2 presents these generic interests and their relations to competency unit topics.

Table 3

Generic Staff Interests and Unit Topics

| Generic Staff Interests | Unit Topics: Introduction | Classroom Arrangement | Management | Play | Problem-Solving | Self-Concept | Parents | Black Perspective | Chicano Perspective | Literature | Language | Sense Perception | Toys and Games | Child Thinking | Concepts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. INTEGRATION: The integration of experience, its personal representation and its associated affect in the context of learning. | | | | | X | X | | | | X | X | X | | | X |
| 2. SELF-CONCEPT: The conditions and practices in the physical and social classroom environment that promote or diminish a healthy self-concept on the part of all participants. | X | X | X | X | X | X | X | X | X | X | X | | X | | |
| 3. PROBLEM-SOLVING: The conditions that provide opportunities for all children, staff and others to develop their problem-solving skills and attitudes. | X | X | X | X | X | X | X | | | | | X | X | X | X |
| 4. SOCIAL-EMOTIONAL GROWTH: Its relationship to problem-solving, self-concept, intellectual growth, classroom management and arrangement and culture. | | X | X | X | X | X | | X | X | | | | | | |
| 5. INTELLECTUAL GROWTH: Its relationship to autonomously guided learning, to types of feedback, to observation and assessment, to self-conept, integration, problem-solving, sense-perception, culture, and active passive and evaluative learner postures. | | | X | | X | X | | | | X | X | X | X | X | X |
| 6. CULTURE, ETHNICITY AND LIFESTYLE: How are the learner's personal experiences reflected in the classroom environment, its activities, its verbal and written mediums, its curr ulum, its values? | | | | | X | X | X | X | X | X | X | | | | |
| 7. CULTURAL PLURALISM: In what ways does the classroom environment speak to an appreciation for cultural diversity and integrity? | | | | | X | X | X | X | X | X | X | | | | |

Almost all of the outgrowth of the FLS effort is related to these categories and interrelated in ways not easily anticipated nor understood even in hindsight. The FLS is also characterized by its relative lack of concern with traditional curriculum, for example, reading, writing, and arithmetic. Instead it is concerned with themes that cut across all issues of education, themes from which one should be able to derive fairly practical applications. It was felt unreasonable, however, to leave this generalization to chance, and thus a number of units focused on practical issues, such as classroom management, how to work with senses and perception, how to work with children's concepts, how to read stories to children, how to construct language activities, how to select books, and so on (see "FLS Products").

The FLS not only relates its principles of education to broad and narrow curricular activities, but in itself reflects an idea of what that curricula should look like. The FLS attempts to model with adults the practices that one would provide for children learning particular concepts and ideas. The outcome of this effort is not the kind of curriculum that educators are typically offered. It does not tell you specifically what to do with children, which tests to follow, and how to assess skill acquisition and so on. (The exception to this is the material developed for the use of toys and games. See unit description on "Using Toys and Games with Children"). The FLS is not a highly structured curriculum for children. It's an effort to impart to adults an implicit theory of learning and instruction, and to impart it in such a way that classroom personnel become true adventurers in moving towards its implications in practice.

How does the FLS differ from its original conception? For one, a good many of the units are not designed to be used by individuals working in isolation, at their own pace. Most of the units involve group activities,

sharing with others. Some of the units, such as the one on Classroom Arrangement, were written for individual use, although our suspicion is that few would use the units as designed if working on their own. Secondly, the notion of competency itself has been modified not only in development but even more obviously in the use of the materials in training. There are as yet no clear ways of describing the interrelationships of all of the competencies that go into teaching responsively and few of the competencies worth talking about can be treated in simple and didactic terms. Teaching as reflected in the FLS is not a technology that can be implemented by mechanics trained in its implementation. It is a creative act integrating all of the human spirit and almost all of the human spirit needs to be involved in developing new ways of teaching. Thirdly, it is not a competency system as originally anticipated, with clear "entrance and exit" competency measures of student performance. In this sense the FLS is not the kind of system one often associates with the term, "Competency-Based Teacher Education."

Fourthly, it seems unlikely that more than a few users will go through individual units in the fashion in which they were designed. Each unit maps out a reasonably lengthy course of instruction requiring somewhere between eight to 12 weeks. Outside the field testing experience, we've seen little evidence of the FLS units being used in this way, although there are exceptions and it still remains a viable and rich possibility.

Fifth, it is designed for use by a wide segment of practitioners: teachers, assistants, teacher trainers; in short, all those ultimately involved in the education of young children.

Lastly, the FLS is not complete, at least in terms of its original conception. However, it constitutes a core and an initiation which, under ideal circumstances, may well be capable of generating the character and nature of a wide range of competencies implicit but not explicitly dealt with in the existing material.

# SHARING

This section explores the characteristics of the FLS in use and what they suggest for its use by others. This topic is divided into a number of sub-sections: Setting the Stage Field Testing, Main Field Testing, A Case Study of Training, Another Case, Operational Field Testing, FLS Dissemination and Training-Workshops.

## Setting the Stage

If there's one word that captures the human quality of the Flexible Learning System project during its four year history, that word would be "sharing." For one, the FLS itself is a vehicle for sharing ideas and experiences held by the staff. These ideas have often been achieved through the act of sharing, and more often than not, directed to the issue of sharing. For another, our formative evaluation during the development period was a cycle of sharing involving the training of trainers who in turn trained student, who in turn shared with us what they had learned and their impressions of the experience. And lastly, our dissemination activity during the last year has involved a range of sharing activities from simply informing people about the availability and surface character of the FLS, to the intensive and interactive sharing in the context of FLS training workshops.

Education itself can be broadly viewed as a sharing process, establishing mutual concepts and mutual forms of their representation. However, there are numerous and often conflicting views of what constitutes an exemplary form of educational sharing. Many educators and programs view sharing as a one-way process, as an imparting of information from the expert or teacher to the novice or student. The role of the student is to follow and

to respond. In this view, sharing by the learner is limited to expressing what has been learned, as feedback to the teaching process.

An opposite view characterizes the FLS. Here, sharing is viewed as a reciprocal process, a two-way street, in which the learner shares in the formation of the questions to be asked, the means and resources used in seeking answers, the personal experiences and examples relevant to the issues under pursuit, the pace of the learning and so forth. Underlying this view is a belief in the ultimate role of the learner as an inventor of his/her own understanding, its significance and application. What is to be learned must ultimately involve a transformation of what is already known and this means that the learner must act upon and transform or extend what he/she already knows. Involving the learner in reciprocal sharing is an attempt to capitalize on these truths within the educational setting rather than leaving it to chance outside the boundaries of formal education.

Creating an educational environment founded upon reciprocal sharing requires seeking the delicate balance between structure and freedom, a balance requiring constant adjustment and refinement in practice. This is a difficult task, and for this reason alone, not often pursued. If it is difficult for teachers to create such a climate in their classrooms, consider how much more difficult it is to create a printed vehicle which attempts to maintain this subtle balance. The key to this dilemma is to be found not in the materials themselves, but in their use. The FLS is a unique training system because in both its content and process, it attempts to provide a structure for exploring the interplay between structure and freedom in education. The FLS attempts to model in print the character of reciprocal sharing and, in its content, focuses on issues that must be maintained in articulating this

balance between structure and freedom in reciprocal sharing. Thus, in interaction with the FLS materials, trainers become increasingly sensitive to what kind of support must be offered to insure FLS training that is consistent with its underlying spirit.

This section focuses on our experience in sharing the FLS. We will talk about the parties involved, the characteristics of our association, the settings, the types of events that constituted this sharing and draw from this some indications for what the FLS is and the ways in which its information and contents can be transmitted.

## Field Testing

In the 1973 proposal for the Flexible Learning System there was provision for working with teacher training and educational accrediting institutions, to involve parties from some of these institutions in the conception and development of the FLS materials, and, in others, to establish arrangements for field testing the units. We worked with sites all over the country, e.g., New York, North Carolina, Wisconsin, Utah, Idaho, Nevada, California and Hawaii. Most of these people were working within the areas of early childhood education. Often they were providing pre-service training within community colleges and, in some cases, university settings. In addition to these institutions, a fair portion of the field testing, particularly preliminary field testing, involved learners in in-service settings, such as teachers, assistants and administrators in Head Start and Follow Through programs, Children's Centers and K-3rd grade classes. The relationship to these institutions during the first

three years of the project involved providing training on FLS units as a means for part of our evaluation cycle.

The Preliminary Field tests of individual units constituted our first sharing of FLS material. Generally, the developer of a unit worked with students in pre-service or in-service settings to try out preliminary forms of the unit s/he was developing. The purpose of this phase of testing was to explore and refine the process that was beginning to emerge, the content, the types of issues being addressed, the kinds of concerns and questions that the students raised, aspects of the topic that hadn't been previously considered, the complexities of procedures and so on. This sharing involved working with learners and being open to feedback while keeping a focus on the transmission of certain acitivties and/or information.

Main Field Testing

Main Field Testing invovled our training someone else to work with learners. Usually, the developer of the unit met for two days with one or two instructors to help them prepare for the use of a FLS unit with their students.

Individual developers took differing approaches on how to use those two days to maximum advantage. In some cases, they used activity oriented experiences, going through certain unit activities, or activities invented for the specific purpose of training Main Field instructors. In other cases, developers went through the unit step-by-step, discussing the purpose of each session, some do's and don'ts, some things to keep in mind, the transitions between various sections, and so forth. The obligation of the developers was to help the Main Field Test instructors do a reasonable job of using the material in their classrooms under usual conditions.

A Case Study of Training.

In preparing for the Main Field Test of the unit on Arranging the Classroom, I, as the developer, met with an instructor at Merritt Community College. She was willing to devote the first eight weeks of her class in trying out the unit as it was written. Our discussions covered a period of three days over a two week period. I didn't provide any special activities, but described how unit activities were carried out and how to provide students with other experiences. We worked out a fairly tight schedule of class activities; which section of the unit would be covered on which day; how the topics would be blocked out. We went over a test that was going to be given to the students both before and after the course, and other data collecting procedures.

The students in this course were a diverse group. One was a director of a co-operative nursery school, another a teacher in a private pre-K school. Others were part of an innovative program in Oakland in which para-professionals ran a classroom essentially on their own. Some students were interested in early childhood education but not yet working in classrooms. Some were student teachers with classrooms. The instructor specified certain before and after class readings; certain activities for students to carry out in classrooms, observation and evaluation with instruments contained in the unit, and conducted discussions about various concepts and issues in the unit.

On the whole, this sharing appeared to be a pleasant and productive experience for the teacher and students. The teacher felt she had acquired a number of insights into the issue of classroom arrangement and found it to be more exciting and complex than she had previously thought. The students seemed to

enjoy the course and discussions. They stated that they found the material, activities and ideas interesting and useful. The measures we took of the knowledge students had before and after the course indicated they had made significant gains by the end of the course, even though many had been working in classrooms for some time.

However, most of the class discussion on the unit was not process oriented. Essentially, it was lecture, with discussion directed by the teacher through the use of informal questions. For example, the class structure did not involve small groups of people carrying out their own learning and discussion. By and large, the instruction wasn't as highly process oriented as we saw later in the trainers who were more familiar with the FLS.

In spite of the significant gains shown on pre-post tests, there was some other evidence that the training was less effective than desired. About half of the students worked in early childhood classrooms and a good percentage were in a position to affect the arrangement of their respective classrooms. With their permission, I made visits to the 13 classrooms, making scale floor-plan drawings with coordinated photographs. There was, in my opinion, a great deal that could be done to improve the arrangement of many of the rooms I had visited.

Early in the course I began to have a number of serious training-sharing concerns. For one, it is difficult to socially and critically evaluate one's working conditions and professional activity. The tendency was for the learners to look at their classrooms in covertly competitive or self-conscious terms. They consequently failed to seriously engage the issues of its arrangement. This was particularly likely if the students worked in widely differing economic conditions (expensive well-equipped classrooms vs. poor and physically impoverished settings), had differing degrees of training

(masters degrees vs. high school diploma), and differing degrees of classroom experience (15 years vs. no experience).

The tendency of the learners was to become more dependent on the unit and yet at the same time, to avoid its design to use an appraisal of reality in order to develop and comprehend principles of classroom activity and arrangement. Instead, the discussions became abstract and divorced from the reality in which many of the students worked or participated.

I was asked by the instructor, probably because of my unintentional communication of the above concerns (although I was not all that clear on the issue during that period), to lead a couple of the sessions in order to relate the material to the students' professional reality and to develop more interest and participation. I complied and was unsuccessful during the first session and complimented on the second. In the first, I attempted to set up small group discussions based on the slides and drawings I had made of their classrooms. One of the problems was inappropriate equipment and facilities for simultaneous showing of three slide shows with opportunities for others to be talking, writing or reading. Better planning might have improved this. More important was the medium, a public sharing (slides) of their classrooms, an issue that the overall course seemed to avoid, and possibly wisely. This coupled with the lack of small group facilitators and little preparation of the students for working in this manner, lead to a less than ideal session.

In the second session, I consented to doing a "show and tell" because "the students want to know what the expert thinks. They have a right to know." I tried unsuccessfully to explain that this was the function of the unit and we were trying to test its performance. I reluctantly agreed to analyze and discuss the organization of the Merritt Community College pre-school, operated by the faculty and students. (The course instructor was already critical of its arrangement and glad to have it discussed). This proved an interesting topic and one which for a

variety of reasons, was an appealing one for the students. I analyzed with slides and floor plans, and then created changes that countered each of the points criticized.

I then went on to discuss and illustrate with slides, how one might look at two other types of classrooms. One was a well-equipped upper middle class parent co-operative nursery. The other, an older, urban, small classroom equipped with 30 desks. This portion of my presentation was probably liked by those who identified with the first classroom and disliked by those who identified with the latter. A student who worked in the relatively impoverished and traditional classroom under discussion, was probably insulted and hurt by my exploring how it could be transformed into an open-education learning-center oriented classroom within the physical and financial constraints of the school. This was in spite of the fact that she was not responsible for its present arrangement and not in a position to change it. This was also in spite of my attempt to be sensitive to the situation as I was aware of the possible risks, e.g., the planning for the first session made sure none of the students were a part of a group analyzing his/her own classroom.

During my visits to the classrooms of the students, I saw an enormous number of possible changes, reasonably simple ones, that could be carried out if the unit was followed and understood. At the end of the course, I received a number of requests to come and evaluate their classrooms and to make recommendations. However, when I offered to freely consult with them if they would describe three things they liked and didn't like about the arrangement or function of their classroom, the only taker was a teacher in a small private pre- through third grade school.

I've spent time in describing this Main Field Test because it sheds some light on important issues of sharing and its relationship to the FLS. It shows that a unit can be followed by a conscientious and sensitive

teacher and yet fail to yield the confidence in one's own problem solving the FLS is designed to promote. It suggests that focusing on abstract rather than concrete and relevant examples separates the learner from his/her own learning, in spite of significant gains on paper and pencil instruments. It suggests that inadequate handling of the emotional issues attached to sharing, or an avoidance of personal experience and frames of reference, results in a less integrated and personal respresentation of a concept. And, of course, it suggests that the integration of emotions and intellect in any area that directly touches one's life, may take much more time than the span of a course.

Another Case

Other developers who were preparing trainers to conduct field testing on their units, used the two days of training differently than what has just been described. For example, directors of early childhood programs in community colleges, attended a two-day training session on the sense perception unit during which they were provided with "hands-on" types of activity, as well as a leading-through of the module organization, purpose, etc. They were pretty much left to their own in terms of how they would conduct the course. There was again a pre-post instrument for the students to measure their attitudes about the material and their impresions and criticisms as well as the knowledge they gained during the training.

The reflections of at least two of these instructors, both with a greater degree of experience and trainingthan in the previous case, suggested that the two days of training and the use of the unit in their courses had an important effect on their concept of teaching itself. They began to see the importance of activity and the importance of drawing upon one's own experiences, the importance of allowing people to make their own assumptions and to focus on things that strike them as interesting and significant. They moved away

from didactic lecture or even informal discussion, to structuring experiences for the students such as they would have greater autonomy.

This insight into the practice of teaching resulted from using the material in a way modeled or suggested by the developers. An important social dynamic affecting this result was the involvement of two developers and two trainers during two days of sharing.

Operational Field Testing

Towards the end of the third year of development and Main Field Testing, a complex and final form of unit assessment was carried out as an Operational Field Test, (OFT). The training of OFT trainers was again carried out in the fashion of the Main Field Testing.

The Operational Field Test focused on three units selected on particular criteria: the classroom arrangement unit, the unit on sense perception, and the unit on enriching children's literature. Following training by the developers, the instructors worked with in-service students. A series of assessment sessions of students and their classrooms were made before, during and after training. The results of this evaluation showed significant and positive changes both in paper and pencil tests and classroom observations on two of the three units. Because of Instrumentation problems the unit on "Enriching Literature" did not result in changes. (Taylor et al., 1975 and November, 1975). One finding of this study deals directly with sharing and, in some sense, accounts for why our test results may not, in fact, reflect changes that other indicators suggest had occurred. The finding was that as people progressed in the training, there was an increasingly "convergent validity" between the pencil and paper tests and the classroom observations; meaning that the two tests were coming closer to meaning the same thing.

Our interpretation of this interesting phenomenon can be illustrated with the Classroom Arrangement unit OFT which showed significant gains in both pencil-paper measures and classroom observations, as well as gains in convergent validity. The paper-pencil test is a representation of the test developer's understanding of the classroom arrangement unit; the unit is the developer's representation. The course instructor creates new representations in order to translate the unit to the students. The students in turn represent their concept of classroom arrangement by the actual arrangement of their classrooms. In the beginning of training, all these parties do not share mutual ways of representing these concepts. The "hi-education, test-wise" students do well on the pre-test irrespective of how well their classrooms are arranged. The "lo-education, test-naive" students do poorly on the test irrespective of how well their classrooms are arranged. As training proceeds, both groups learn how to translate their physical arrangements into the representation in the training environment. In the translation of instructional representation into practice, there is conceptual growth. This is the crux of what learning is about, i.e., adaptation of common concepts and common ways of representing those concepts. (This issue is explored in the unit entitled, Working with Children's Concepts).

FLS Dissemination and Workshops

This last and final year of the FLS operation was focused on the issues of FLS dissemination or sharing. Our plan called for training personnel from four National organization or sites: a co-operative of 20 school districts in Washington State; the New Hampshire State Dept. of Education; a competency based CDA training program at Honolulu Community College and the

California Consortium of Community Colleges in Early Childhood Education. In addition, we proposed to provide some training for people from local educational agencies such as community colleges, child-care centers, resource teachers and so forth. We planned to restrict our training to those trainers who would institute some kind of instructional activity using the FLS material as well as providing some kind of dissemination of their experience (i.e., sharing with others what they knew about it, what their experiences had been, letting others know that the FLS existed, etc.).

Our major purpose was to provide training so that the National Sites would have access to the total FLS system and to offer FLS training on at least ten units out of the fifteen units. Two national one-week workshops were designed to accomplish this training. Each national workshop was to be preceded by a local workshop which would fill a dual purpose of providing service to local organizations and act as a preliminary tryout of the in-depth sharing we wanted to have for the national sites. These workshops were eventually limited to three: the first for a local audience, the second for a national audience although some Bay Area educators were involved, and the third combined our national sites and a broader segment of the local population. The first two workshops involved approximately twenty to twenty-five people, and in the third, approximately thirty-five participants.

There were some interesting results from this effort. One of these is that the five member FLS staff developed a whole new awareness as to the character of the FLS as a training resource. As part of this growth it became clear that the FLS was not a static set of units to be followed in step-by-step fashion. Rather it was an approach to working with children

and an approach to working with adults that was consistent within itself and could be generalized to the construction of a wide range of activities for both children and adults. That is, the FLS is not limited to a tightly structured sequence of activities designed to impart a clearly specifiable, objectifiable set of competences.

Another result that was reassuring and pleasing, was that a number of people with a great deal of experience in education (i.e., teachers, teaching assistants, parents, adult instructors, the Responsive Education field site personnel, etc), were highly impressed by the insights they were gaining as a result of our training program. These insights dealt not only with the material and subject matter itself but there was a generalizing from these insights to a broader implication about education and teaching activity in general. It must be mentioned that theses were seasoned educators; people who worked in classrooms with children, who have directed programs, who have been college instructors and, of course, who had been students themselves. And they were reporting that this was a significant event in their educational experience. Our last workshop, in particular, led a number of people to say that this was the finest workshop that they had ever experienced.

It's hard to know what to do with this kind of praise, but we think it should be trusted. In a way our impressions are that many of the insights reported and the demonstration of these insights transformed into practice, may still be short of what the staff have come to understand about the FLS. However, that does not diminish the importance of the personal growth that has been accomplished within the FLS experience, for the individuals who have changed and for its implications about the nature of the FLS. There are clear implications that bear on the question of how individuals learn and the conditions that foster that learning. Particularly

the role of learners as semi-autonomous agents constructing their own learning. The outcome of the workshops also suggest that the FLS materials provide a structuring of social and mental activity that makes it possible for the deeper underlying spirit or approach of the FLS program to surface and become apparent.

As implied in all of the above, there is also something which happened within the workshops that is most important to the understanding of how people learn. Before turning to some of those issues, however, let us review the three workshops and their basic plan in the framework of our growing understanding of the FLS as a resource.

The object of the first workshop was to preview the type of workshop to be used later with our National site trainers. Our goal for the year was to make sure that the trainers went back to their site with the ability to train on as many of the units as possible. We recalled that during our previous field test work we had spent two days training people to work with a unit. It thus appeared reasonable that in the course of a five-day workshop one person from a site could become familiar with three units at the most. If two people came for a second workshop later in the year they could again collectively learn about six more units.

As we began actual workshop planning, we faced a critical decision. We wanted a dynamic workshop with good content focus and maximum utilization of the personal resources represented by the twenty professionals. More than this, we wanted to model much of the implicit themes of the FLS with particular emphasis on active-construction as opposed to passive-receptive learning. This problem of matching these goals to our original plan to train participants on three or more units meant that we must either sacrifice the modeling or reduce the amount of content to be covered.

Our final plan involved five voluntarily selected core-groups, each focusing on a separate unit. The first three days involved core-groups explorations of their respective units and total group presentations on Tuesday and Wednesday afternoons by individual core-groups. Core-groups were encouraged to construct activities for others in order to share with them what the core-groups understood about their respective units. This format served to clarify a concept that was implicit throughout the FLS; the construction of a representation of newly acquired ideas served to further one's understanding of their implicit relationships and functions. That is, the construction of some representation of what is known is a powerful vehicle for extending the scope and power of that knowledge.

There were some criticisms of this first workshop. A number of participants expressed a sense that there was an implicit educational theory in what we were doing and in the FLS and they wanted us to speak more directly to what this was. Many also felt that although they were reasonably familiar with the unit they were working with, they really weren't familiar with very much of the system as a whole. They felt that some of the workshop activities were contrived and that the pacing was difficult in the sense of having to prepare for presentations and having to be ready to perform on time and having to restrict oneself to this even when it didn't seem to be the most natural thing at the time. By the time we got to Thursday and switched to focusing on how they would implement this material back home, we saw a real dispersion of the energy and momentum the group was evidencing on Wednesday.

Above and beyond these criticisms, however, there was an overwhelming

opinion that the workshop was a genuinely enriching and provocative experience. Some of the participants were awed by feelings of trust, reciprocity and openness maintained throughout the week. Many reported that these conditions were evident at a level completely unfamiliar to them in professional life. Many reported a growing awareness of personally powerful issues in the education of adults and children. All reported gaining a rich amount of content regarding the area studied in their core-group. By and large, we felt that it was a successful workshop. We were impressed with what had happened to the participants, what they had learned and had felt and we were pleased with what the FLS and our staff had been able to provide.

In the second workshop most of the participants were from National Sites. It focused on the same units as in the first workshop: Classroom arrangement, Introduction, Self-Concept, Language Integration and Enriching Literature Experiences. We also followed essentially the same procedure and used the same facilities. Because the second workshop followed shortly after the first, there was little time for the staff to fully integrate what had happened.

The second workshop avoided some of the failings as the first, and it also had the same strengths. In some regards it was evaluated by participants in even more posicive terms than in the first. One thing that might have contributed to this reaction was that many of the participants stayed in a local hotel and had an opportunity for interaction both on the way to and from the workshop in the morning and evening (many walked together as there was a strike at the time and no forms of municipal transportation; it also rained!).

This probably contributed to a sense of comaraderie. In addition, there were opportunities for informally meeting with the staff after the day's work. One evening many of the staff went to dinner with a number of the participants and in some cases the conversations went long into the evening. The important point, however, is that a repeat of similar learning conditions brought about similar results in different populations.

The staff then began to think about the third workshop to be held at the end of July. We wanted something different from the previous workshops as well as something better and more useful. We also wanted to include a wider segment of participants to include local as well as national sites. To maximize the effect of a limited staff, we also decided to restrict the participants to those who were actually involved in providing sustained or ongoing training. We wanted trainers to acquire more of a sense about the FLS as a whole and to consider the total Flexible Learning System as a resource, rather than to learn to use a small set of units.

Another ingredient being considered was the means by which people could relate the system to their needs and to the pragmatic concerns and issues they were dealing with in their own professional lives.

The workshop was organized around four core-groups which, unlike the previous workshops, were not unit specific. These groups were to focus on four broad and inter-related topics: social interaction, intellectual development, culture and education and classroom activities. These topics were chosen in anticipation of the following: (1) a variety of units would be represented in each of the core-groups; (2) some of the same units would be represented in different core-groups; and (3) participants would be able to relate their own professional concerns to one or more of these core-group topics. (See Figure 3).

Opportunities were provided during the first day for participants to become acquainted with each other, to explore unique and mutual concerns, to begin an exploration of these concerns and their possible relationship to each of the four core-groups and to become acquainted with the FLS material during the time allotted for exploring the material in a variety of learning center settings. Interim small groups with random assignments were established to facilitate Monday's goals and were guided by staff members.

Towards the end of the first day we collected information on people's interests in terms of which of the four topic areas they would like to work on as well as which units they wished to study. There was a concern that everyone would be interested in the same topics or that there would be an overwhelming interest in a limited number of units. Our hopes were that the workshop participants would become aware of how a number of units related to a common concern and how each unit related to a number of broad topics so that they would get some sense of the broad, flexible character of the FLS as a resource. As it turned out, there was a fair amount of heterogeniety in terms of interest, the units, and the four topics. By and large, the thirty-five or so participants divided fairly evenly into four groups, some of which focused on a sizeable number of units and, some on fewer units.

The newly formed groups spent time on new introductions, exploring common concerns, and developing some idea of the units being brought to bear on the common topic area. After this, participants were given the task of figuring out a way in which they would share their particular unit on Wednesday morning within their core-group.

There was a great deal of enthusiasm reported later about the degree

of trust that had been conveyed up to this point. The relaxed pacing, the responding to individual concerns, the developing of some sense of comradeship with the rest of the participants, the open exploration of the FLS material, and even on Tuesday afternoon, the opportunity to work in a style that was entirely of their own making. We as a FLS staff simply made ourselves available as resources to help people when they had a problem, either with regard to the task or with how they were approaching its conclusion. We made ourselves available to people from all the core-groups since we had more familiarity with some units than others.

On Wednesday morning the core-groups conducted their sharing activity within each group in order to develop a collective sense of the various units and their relationship to the broader core-group topic (i.e., social interaction, culture, etc.). The next task was to begin to construct some way to share what the core group had learned with the total group. We had conceived of a rather radical plan for this "cross-fertilization" called the "FLS bazaar." This involved simultaneous presentations by individual core-groups. All of the members of the core-groups would be involved in both presentation activities and participation in the presentations of other core-groups. This was a difficult logistic plan and there was no way of anticipating exactly what form it should take. We proceeded with the belief that we could meet on Wednesday night and see what the feasibility was for creating a reasonably coordinated activity in which there would be maximal opportunities for presentation and participation on Thursday afternoon and Friday morning.

We allowed opportunities for people to block off certain times in

which the total group would be available as a participating audience or, at least, half the total group. Some of the groups decided to do large presentations broken into two sessions, and they issued tickets to half the workshop participants for the Thursday afternoon performance and half for the Friday morning performance. In some cases the activities were sequential. Other groups kept an area open with different learning centers each manned by a different core-group member but designed as a total statement emerging from the individual learning activities.

Some comments should be made regarding the activities of the staff during this workshop. As in the previous two workshops, there was an immense amount of planning activity with a great deal of energy extended in constant tuning and refinement during the workshop itself. There were long meetings into the evenings, particularly at points where there were difficult transitions to be made. There was a great deal of concern given to reading the daily diaries we had asked participants to share and in keeping closely in touch with where the workshop was going, where the energy was, the flow of interest, the way people were working, the areas of frustration and concern, etc.

One thing which characterized the staff in this workshop was somewhat different than the previous two. There seemed to be less personal excitement and investment of energy and enthusiasm in the actual day to day running of the workshop. In the previous workshops, this writer, for one, played a strong role in core-group, helping members prepare activities and so on. And I received a certain amount of criticism for being too paternal with my group, being too concerned about its being ready and questioning the character of what it was doing and so on. In this workshop

I stayed in the background. I didn't have expertise on some of the units the group was concerned with nor did the other staff with their core-group members. The core-group broke into a number of small groups which were working simultaneously with a variety of different problems. It was virtually impossible to take a directing role with respect to the kinds of insights they were making, the kinds of activities they were constructing and so on. One of the results of this change in working style was that the staff experienced less of a social and intellectual "high" than that experienced by the participants.

In the introduction to this section on sharing it was pointed out that the topic of sharing deserved attention because it constituted the predominant theme and prominent activity of the FLS during its four years. The same can be said of the workshops and, particularly, the third workshop. Not only was the staff sharing the Flexible Learning System but the manner in which it was shared involved participants in constantly constructing ways of sharing their own understanding with others. Particularly in this third workshop, there was no "teach-me" in the traditional sense of the term. This raises the issue of what it was that we were sharing. Aside from making available a number of written materials that could have just as easily been made available in the mail, what were we sharing? We propose that at least one answer to that question is that we were sharing a "heuristic." Before we say what we mean by this, let us digress into FLS history for a moment.

The Responsive Education Program was often referred to by others as the "responsive model philosophy." Its founder, Glen Nimnicht, claimed it wasn't a philosophy, but rather, an educational heuristic. A heuristic is something that serves to discover or stimulate investigation.

It involves methods of demonstrating to others in a way that gets them to investiage further by themselves. The choice of the term heu.istic - the choice of a heuristic design - is itself an expression of a particular viewpoint about learning and about how learning proceeds. We can use the concept of heuristic design as a way of focusing on one of the most important aspects of our sharing experiences with the FLS and ask ourselves: What constituted the heuristic conditions that have been documented so thoroughly in the reactions, impressions and feedback from the participants themselves?

Here are some elements of the heuristic design in the workshops: Participants were actively involved in construction in the most literal sense, making up something to represent their own understanding, with autonomy and freedom as to what they would represent as well as the methods. At the same time, there was always a clear focusing, a clear set of instructions, a clear goal and an effort made by staff to help people narrow their concerns to manageable limits so that they could recognize what could be shared within a reasonable period of time. This involved giving a clear framework in terms of time, space, materials, and topics and providing limits so that one is not cognitively or emotionally overwhelmed. This makes it more likely that certain kinds of events would occur. Both focusing and freedom are important elements in heuristic educational design.

Beyond construction and focusing, there was also a constant appreciation for the interest and experience that individuals brought to bear on a situation, and a constant adherence to a trust and faith that people can produce significant learning for themselves by relating their own personal experiences and what they already know, to concepts that a group of people are struggling to understand and represent.

Throughout the workshops there was an appreciation for the various social situations that can contribute to learning, such as individual exploration, mutual activities of pairs, interactions within small groups and interactions in large groups. Some of the dynamic qualities involved a variety of relationships, passive, listening, very active constructing, switching of roles, (participant in one case - performer in another), etc. All of these contributed to the heuristic quality of the workshops.

There was a constant concern on the part of staff with establishing a sense of mutual trust by attentively listening, by paraphrasing when appropriate, by making sure that points were heard and helping people appreciate the richness that might be embedded in an initial grasp of an idea or an initial association or through critical considerations. Conditions were provided where thinking, problem-solving and sharing could go on without an immediate need to come to answers or to appear right. In some cases, people generated a great deal of information without a lot of cognitive, higher level censoring going on (e.g., brainstorming). In contrast, other opportunities encouraged focusing in and analyzing an idea or following through with more rigor.

The success of the workshops in terms of people's reactions was marked, particularly in the case of the third workshop. Participants experienced an important process and they were experiencing a growth in their own conceptual understanding. The focus of the workshop was not, however, an in-depth pursuit of ideas and skills. It was not designed to replace the type of training outlined by the units themselves. The workshop was rather, a vehicle for alerting trainees to the possibilities embedded in the FLS as a resource and the considerations that follow from its implicit instructional theory. The significance of the workshop

lies in understanding the dynamics that made the workshop successful and recognizing the practices that related to the satisfactions and gains.

The workshop is one important vehicle of communication. It seems to be a highly successful means of imparting the kinds of insights that many of our participants reflected back to us. It is not clear, however, that a workshop of this nature is essential to trainers using FLS material. There are some cases of very successful trainers who report a measurable growth in their own teaching strategies and understanding of early childhood education with minimal contact with FLS staff. However, in cases where this has occurred it has been our experience that such trainers were on the threshold of changing their teaching from a didactic to process-oriented approach and had found the FLS helpful in their move in that direction.

Summary

In summary, it seems that the most important thing to be shared by the FLS is, ultimately, not just the units but the kind of thinking, concern and consideration that went into the design of the units. The activities, the sequence, the pacing and the topics all struggle to address the practical problems of early childhood education in a significant way. It's quite likely that we would see some of the results of sharing FLS, even without direct contact with the staff. Generally, however, we've seen the deeper issues and the underlying spirit, or underlying characteristics of the FLS grasped and related to educational practice by people who participated with us in workshops involving a constructive and creative relationship to the materials.

When trainers or teachers become autonomous or inventive in their own

professional activities they can use the FLS or any other resource as a resource to solve their problems. They can then respond to changing demands or circumstances of their students and provide training that more closely models the kind of learning we hope for in the education of children. The message we want to impart is the importance of creative reconstruction of the vehicles of their learning and the importance of doing this in a way which, at all times, respects and incorporates the participation of the learners into the design of the training program.

People trying to work in this way give themselves permission to abandon the recipies, to use the material in a personally meaningful way, to see education as a growth process, as a discovery, as a self-clarification, and not as a list of specifiable skills or competencies clearly objectified and understood. With these understandings and conditions people can use the FLS and produce substantive experiences for students and ultimately for children. Lacking this understanding and this orientation to education, the FLS still offers a rich resource. However, the degree to which the practices of the potential trainer are congruent with the underlying themes of the FLS, the more likely it is that students and, ultimately, children will truly benefit from this developmental effort and this four years of sharing.

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